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(U 338-E)

***Testimony of Southern California Edison
Company in Support of Its 2014 Energy Storage
Procurement Plan***

Before the

Public Utilities Commission of the State of California

Rosemead, California
February 28, 2014

Testimony of Southern California Edison in Support of its 2014 Energy Storage Procurement Plan

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I.

INTRODUCTION

A. Overview of SCE's Energy Storage Procurement Plan for 2014

Pursuant to Decision ("D.") 13-10-040, or "Storage Decision,"¹ Southern California Edison ("SCE") is filing an application ("Application") requesting California Public Utilities Commission ("Commission" or "CPUC") approval of SCE's 2014 Energy Storage Procurement Plan and is concurrently serving this testimony in support of SCE's Application. As explained in SCE's Application and throughout this testimony, SCE's proposed 2014 Energy Storage Procurement Plan is reasonable and consistent with the requirements and policy objectives of the Storage Decision.

This testimony consists of six chapters:

- Chapter 1 provides an overview of SCE's 2014 Energy Storage Procurement Plan and the background leading to the Storage Decision and the filing of SCE's Application;
- Chapter 2 describes SCE's overall storage procurement framework and discusses how SCE will identify storage need as well as how SCE will meet the CPUC's storage procurement requirement;
- Chapter 3 identifies SCE's existing and planned storage projects that SCE believes are eligible to count towards SCE's storage procurement targets;
- Chapter 4 discusses the mechanisms by which SCE will procure additional storage, including a 2014 Energy Storage Request for Offers ("RFO") and the potential development of utility-owned projects; and

¹ D.13-10-040, Decision Adopting Energy Storage Procurement Framework and Design Program, Oct. 17, 2013, at 77 (OP 3).

- Chapter 5 outlines SCE’s plan for cost recovery, including SCE’s plan to seek authorization of costs for an independent evaluator and the CPUC’s storage program cost, as well as for future storage projects.
- Chapter 6 is a brief conclusion.

SCE also attaches the following appendices to its Testimony:

Appendix A Table with Details on All Existing Eligible Storage Resources

Appendix B RFO Documents

Appendix C Consistent Evaluation Protocol

Appendix D Witness Qualifications

SCE seeks prompt approval of SCE’s Application so that it can launch its 2014 Energy Storage RFO by December 1, 2014 as required by the Storage Decision, in order to meet the 2014 storage procurement cycle’s target of 90 megawatts (“MWs”).

B. Storage Procurement Final Decision Background

Assembly Bill (“AB”) 2514 (Stats. 2010, ch. 469) required the Commission to determine appropriate targets, if any, for each Load-Serving Entity (“LSE”) to procure viable and cost-effective energy storage systems.² Rulemaking (“R.”) 10-12-007, opened to implement AB 2514, culminated in the Storage Decision which was adopted by the Commission on October 17, 2013.

The Storage Decision requires the three Investor-Owned Utilities (“IOUs”) in California to procure 1,325 MW of storage capacity by 2020.³ SCE’s share of the 1,325 MW target is 580 MW, which is divided into biennial procurement targets in 2014, 2016, 2018, and 2020.⁴ In the first biennial procurement cycle, beginning in 2014, SCE’s targets are 50 MW of transmission-

² Pub. Util. Code Section 2836 *et seq.* (Deerings Supp. 2014).

³ D.13-10-040, at 2.

⁴ D.13-10-040, at 15.

1 connected storage, 30 MW of distribution-connected storage, and 10 MW of customer-connected
2 storage.

3 According to the Storage Decision, the Commission's goal is to transform the storage
4 market to overcome the barriers that are hindering broader adoption of emerging storage
5 technologies.⁵ SCE shares the same aspirational goal as the CPUC for energy storage –
6 transforming the storage industry – and recognizes the key role that storage may play in
7 California's energy future. Accordingly, SCE looks forward to discovering reasonable and
8 effective energy storage solutions to help maintain system reliability, integrate renewable
9 resources, and reduce greenhouse gases.

⁵ D.13-10-040, at 7.

II.

STORAGE PORTFOLIO DEVELOPMENT FRAMEWORK

A. After Counting Its Existing Eligible Storage, SCE Intends to Procure at Least Enough Storage to Fulfill Its 90 MW Target for the 2014 Procurement Cycle

Pursuant to the Storage Decision,⁶ SCE's target for the 2014 procurement cycle is 90 MW across the three grid domains. In this cycle, SCE intends to procure at least the difference between its existing eligible energy storage capacity (including the 50 MW of expected storage from SCE's currently ongoing Local Capacity Requirements ("LCR") solicitation) and the 90 MW target. Because the Storage Decision allows SCE the flexibility to shift between the transmission-connected and distribution-connected buckets,⁷ SCE's required minimums in each specific point-of-interconnection category are 10 MW, 6 MW, and 10 MWs for customer-connected, distribution-connected, and transmission-connected projects, respectively. SCE intends to meet these point-of-interconnection minimums as well as the 90 MW total minimum by accounting for existing eligible projects, procuring the remainder to meet the minimum in each point of interconnection category, then procuring the remainder of the 90 MW in either transmission-connected or distribution-connected buckets, depending on which Energy Storage RFO offers provide the most value to SCE's customers.

While SCE intends to procure storage to meet the 2014 targets, SCE retains the flexibility to buy more or less than the targets depending on the response in the first Energy Storage RFO. If SCE sees more cost-effective storage projects than are required to fulfill SCE's storage targets, SCE may ask the CPUC to allow additional procurement of storage that would count towards SCE's future biennial storage procurement cycles.⁸ Conversely, if there are not enough effective

⁶ D.13-10-040, Appendix A, at 2.

⁷ D.13-10-040, at 39.

⁸ D.13-10-040, Appendix A, at 4 ("If the amount of energy storage procured by an IOU exceeds its biennial procurement target, the IOU may reduce its next biennial target by the excess amount")

1 and reasonably priced storage offers, then pursuant to the Storage Decision, SCE may file a Tier
2 3 Advice Letter requesting that the CPUC allow SCE to defer its storage procurement to
3 subsequent procurement activities.⁹

4 **B. To the Extent Possible, SCE Intends to Encourage Projects Across a Variety of End-**
5 **Uses to Support Market Transformation**

6 In order to support the goal of market transformation, SCE aims to procure storage that
7 fulfills a variety of functions. To that end, SCE seeks to procure energy storage projects that fall
8 into a wide range of “end-uses” as identified by the CPUC.¹⁰ While cost-competitiveness is the
9 primary factor with which SCE will select energy storage projects, contribution towards market
10 transformation and project diversification are also important factors. By diversifying projects’
11 end-uses, especially in the earlier years of storage procurement, SCE intends to encourage a
12 broader variety of energy storage projects and develop a wider understanding of how different
13 projects perform at these different functions. This understanding will be useful as SCE procures
14 larger quantities of storage in future years. Moreover, establishing some variety in the 2014
15 procurement cycle will help prevent a small number of more-developed storage applications
16 from dominating the market early on.

17 **C. All of SCE’s Procured Storage Projects Will Meet At Least One of the CPUC’s**
18 **Three “Operational Requirements”: Grid Optimization, Renewables Integration, or**
19 **GHG Reduction**

20 As required by the Storage Decision, SCE’s storage projects will contribute towards grid
21 optimization, greenhouse gas reduction, or renewable integration.¹¹ SCE’s 2014 Energy Storage
22 RFO will require all projects to fill at least one of these operational requirements. SCE will

⁹ See D.13-10-040, Appendix A, at 10.

¹⁰ D.13-10-040, at 3.

¹¹ D.13-10-040, Appendix A, at 8.

1 specify which operational requirements are met when it submits requests for approval of its
2 proposed storage projects.

3 **D. SCE Will Attempt to Use Storage to Fulfill System Needs Where the Needs Can Be**
4 **Identified**

5 In California, the CPUC, the California Independent Systems Operator (“CAISO”) and
6 the California Energy Commission (“CEC”) work together to support grid reliability and support
7 system needs. SCE actively participates in these proceedings. In addition, SCE plans and
8 operates a distribution grid to deliver power from the CAISO-operated grid to end-use customers
9 and to manage distribution-level distributed generation resources. Under AB 327, SCE will
10 develop a distribution resources plan to identify optimal locations for distributed resources.¹²
11 SCE will leverage these existing processes to determine the best uses for storage and will attempt
12 to use energy storage to fulfill system needs where such needs can be identified.

13 **1. Generation Need**

14 **a) Generation Planning Process**

15 The Commission conducts an in-depth review of the electric system’s
16 supply-side resource addition requirements in its biennial Long Term Procurement Plan
17 (“LTPP”) proceedings. The Commission authorizes procurement of new infrastructure for
18 system and local reliability purposes based on extensive analysis submitted by the CAISO and
19 the utilities. Such analysis is focused on the projected balance during a 10-year planning period
20 between the load that the utilities need to serve and the resources available in the electric system
21 to serve that load.¹³ SCE plans to consider energy storage among its options when it procures
22 additional resources to fulfill the Commission’s requirements to procure additional system and/or
23 local reliability resources.

12 AB 327 added Section 769 to the Public Utilities Code, which discusses the new distribution resource plan.

13 The history of the LTPP is available at
http://www.cpuc.ca.gov/PUC/energy/Procurement/LTPP/ltp_history.htm.

1 **b) LTPP Studies Identified a Need for Up to 2300 MW of New Local**
2 **Capacity in the Western Los Angeles Basin in 2020**

3 The most recent Commission authorization to procure resources occurred
4 in D.13-02-015 in Track 1 of the 2012 LTPP, where the Commission authorized SCE to procure
5 between 1400 and 1800 MW of new local capacity resources in the Western Los Angeles Basin
6 subarea of the Los Angeles Basin service area, and between 215 and 290 MW of new resources
7 in the Moorpark subarea of the Big Creek/Ventura service area.¹⁴ Track 1 of the 2012 LTPP
8 considered the need for new resources to support local area reliability in the absence of Once-
9 Through Cooling (“OTC”) resources that will retire in 2020 in compliance with State Water
10 Resources Control Board directives. The Commission is currently deliberating over Track 4 of
11 the 2012 LTPP, which might result in an authorization of procurement of additional local
12 capacity resources in light of the permanent shutdown of the San Onofre Nuclear Generating
13 Station (“SONGS”).¹⁵ In a Proposed Decision, dated February 11, 2014, on Track 4 (“Track 4
14 PD”), the Commission authorized procurement of 500 to 700 MW of new local capacity in the
15 Western Los Angeles Basin. The Track 4 PD, which is not final and is subject to change,
16 requires 400 MW of the new authorized procurement to come from preferred resources,
17 including energy storage; up to 300 MW can come from all sources. The Track 4 PD would
18 authorize SCE to consolidate Track 1 and Track 4 procurement in its LCR RFO.

19 SCE will evaluate storage projects as potential solutions for the Local
20 Capacity Requirements need identified in the 2012 LTPP. Additionally, the analysis of future

¹⁴ D.13-02-015, Decision Authorizing Long-Term Procurement for Local Capacity Requirements February 13, 2013, at 2.

¹⁵ Track 1 had assumed continued operation of SONGS. In June 2013, SCE announced the closure of SONGS. Track 4 of the 2012 LTPP is considering the need for new resources assuming closure of all OTC facilities, including SONGS, in 2020. In Track 4, the SCE identified a need for additional new resources in the Western Los Angeles Basin to support local area reliability. SCE has requested procurement authorization for an additional 500 MW from all sources including potentially energy storage as part of the LCR RFO in the Track 4 Testimony of Southern California Edison Company, August 26, 2013, at 6. A proposed decision on Track 4 has been issued and is still pending.

generation needs will continue in the 2014 LTPP; SCE will analyze how storage may be able to fill any need identified in the future planning processes as well.

2. Distribution Need

a) Distribution Planning Process

Each year, SCE reviews its distribution facilities through an annual planning process to ensure that the system is able to provide reliable service to all customers. SCE forecasts peak electrical demand using data on circuit and substation peak loading for all of SCE's feeders and substations, load growth forecasts, demand-side management ("DSM") forecasts, forecasted additions to the system, and other data. Using loading limits based on engineering and equipment manufacturer data, SCE then determines the impact of peak demand to its facilities and identifies those facilities where demands are projected to exceed the limits.

SCE performs further analysis to determine potential solutions for each of the facilities identified as overloaded. These solutions may be as simple as using switches on distribution circuits to transfer loads from one area to another, or may be more complicated upgrades of the distribution system through capital investment projects. SCE shares the results of the distribution planning process and SCE's proposed solutions with the CPUC in SCE's General Rate Case filings.

b) Requirements for Resolving Identified Distribution System Need

SCE has identified four "reliability asset requirements" that must all be satisfied in order for a facility or device to provide a solution for resolving a distribution overload:

1. The solution must satisfy the peak load at the time a facility overload occurs;
2. The solution must do so for the duration of the overload;
3. The solution must be located in the right place such that the peak loading of the target asset will be decreased and reliability and operability of the grid is not reduced; and

1 4. The solution must be available well in advance of the projected peak in
2 order to ensure reliable service.

3 SCE can fulfill the four reliability asset requirements for resolving
4 projected overloads on the distribution system in several ways. The most common solution is to
5 utilize existing infrastructure to balance loading between area substation and circuits because this
6 requires no capital additions and can be completed rapidly. If it is not possible to balance
7 loading with existing infrastructure, SCE considers small upgrades to facilitate reconfiguration
8 while utilizing as much existing infrastructure as possible. Alternatively, SCE may add new
9 circuits, new transformers inside existing substations, or new substations altogether, which can
10 by more costly, but can also provide enough additional capacity to avoid overloads for many
11 years.

12 c) **Storage as a Solution to Distribution Reliability Need**

13 At a minimum, energy storage systems must meet SCE's four identified
14 reliability asset requirements in order to serve as a distribution reliability asset, whether deployed
15 as a single autonomous unit or as part of a larger integrated solution performing in concert with
16 other systems. These distribution reliability benefits include circuit loading relief and voltage
17 regulation to the circuit at which they are deployed.

18 SCE is evaluating the use of storage systems to effectively provide circuit
19 loading relief and assess the use of such systems to contribute to the planning efforts via several
20 multi-year demonstration and pilot storage projects on the distribution system, as described in
21 Section III.A and B.

22 Storage systems that are interconnected to SCE's distribution grid could
23 potentially provide distribution reliability benefit, or distribution system upgrade deferral benefit,
24 if they reliably meet the aforementioned criteria. It may be possible, though likely challenging,
25 for assets that also participate in the CAISO wholesale markets to consistently meet the
26 reliability asset requirements and receive distribution reliability benefit.

1 Energy storage systems that are controlled by SCE's Grid Control Center
2 ("GCC") and primarily serve distribution reliability needs can meet the reliability asset
3 requirements. Given that SCE can ensure that storage devices meet the four reliability asset
4 requirements if it owns the devices, SCE expects to own the devices that primarily serve a
5 distribution reliability function, as discussed further in Section IV.D.4. Energy storage systems
6 controlled by the CAISO are likely to fail one or more reliability requirements during the period
7 they are control by the CAISO.

8 **d) Locational Value**

9 The location as well as the charge and discharge timing and characteristics
10 of an energy storage project connected to the distribution system will determine whether the
11 device is alleviating or adding congestion on the distribution system. These factors will change
12 depending on whether the device is being controlled by the CAISO or SCE's GCC, and will
13 therefore determine which function the device primarily serves (market or distribution
14 reliability). Distribution-connected projects that are controlled by SCE's GCC will seek to
15 alleviate overloads and, with the proper controls, can defer distribution system upgrades.
16 Distribution-connected projects that respond to market signals for charging and discharging may
17 exacerbate congestion because market prices do not always align with local congestion timing.

18 Recognizing these challenges, SCE has developed a Geographic
19 Information System map layer to provide some direction regarding locational value of potential
20 resources on the distribution system. The layer outlines preferred locations for distributed
21 generation and energy storage discharge based on assumed electrical output during lightly loaded
22 system conditions. It can be found at www.sce.com/ram. SCE will continue to evaluate its
23 distribution system to further refine the locational benefits and costs associated with adding both
24 market and reliability functioning energy storage devices to the grid.

3. Transmission Need

a) Transmission Planning Process

Each year, the CAISO conducts its Transmission Planning Process (“TPP”)¹⁶ to identify potential system limitations as well as opportunities for system upgrades that improve reliability and efficiency up to ten years into the future. The TPP identifies areas in the transmission system that would face reliability concerns and then develops, selects, and initiates the required mitigations each year. While SCE participates as a stakeholder in the TPP and provides input into the process, the CAISO ultimately determines which transmission projects will proceed.

The TPP is a public process and includes assessments for reliability, LCR, policy-driven needs, and economic planning. Any party may submit mitigation options into the TPP for consideration to address a transmission need. Once the CAISO Board finalizes the transmission plan, a solicitation process begins to select qualified sponsors to finance and construct approved projects.

b) Storage Can Defer Traditional Transmission Upgrades

Energy storage located at appropriate points on the transmission system can improve performance and defer the need for traditional transmission investments. There are two general situations in which system performance is improved by adding energy storage. First, locating energy storage in generation-rich areas to act as load and reduce peak generation could improve performance by preventing overload associated with higher generation levels. Storage may be particularly useful in areas with significant renewable generation where that output cannot be easily controlled. Second, locating energy storage in high load areas could allow storage to act as local generation when the transmission system is insufficient to maintain reliable service.

¹⁶ See CAISO’s TPP website available at <http://www.caiso.com/planning/Pages/TransmissionPlanning/Default.aspx>.

1 Traditional transmission upgrades, such as a new line or transformer, are
2 passive devices providing always-on capacity should a critical outage occur on the system that
3 reroutes power toward an overloaded facility. By contrast, energy storage is an active device. In
4 order to be an effective solution for transmission needs, operators of the device will need to
5 determine when to charge or discharge. While energy storage does not need to have the same
6 performance as traditional transmission upgrades, it must be intelligently controlled,
7 appropriately located, and sufficiently sized to meet the expected duration of need in a highly
8 dependable manner.

9 Controlling an energy storage device for the specific purpose of meeting a
10 transmission need is paramount. Operators of the device will require timely information in order
11 to define a critical threshold (when load levels are expected to exceed transmission capability)
12 with sufficient time to enable the device to charge to the required capacity in advance of the
13 need. Charging can only occur in periods where the additional demand will not increase load in
14 the area above the critical load threshold.

15 The capacity of the energy storage device is also critical to addressing a
16 transmission need. A new transmission line or transformer can add anywhere from hundreds to
17 over a thousand megawatts of capacity to the system. An energy storage device would need a
18 similar level of performance to defer such a project. Moreover, a transmission line outage (both
19 the time of occurrence and duration) is unpredictable by nature. A storage device would need
20 sufficient discharge capacity to reduce load in the area to safe levels for the entire time the load
21 is expected to exceed the critical load threshold. During summer peak periods, this can be
22 several hours.

23 Given the CAISO's direct responsibility for all transmission projects, any
24 potential energy storage projects that can address a transmission need should be provided as
25 input into the TPP for consideration. If storage is selected as the approved mitigation, parties
26 interested in constructing the storage projects should participate in the CAISO's sponsor
27 selection process.

1 If the TPP results in energy storage solutions to resolve transmission
2 needs, then the entities financially supporting the storage projects should receive the benefits of
3 counting the storage towards their storage targets. For example, if a project’s costs are recovered
4 through the transmission access charge (“TAC”), for the purposes of the storage targets, utilities
5 would count the percentage of the storage capacity equal to their percentage of the total costs.
6 This allocation of storage capacity “credit” for TPP projects will provide stakeholders with the
7 appropriate incentives to promote viable storage projects as transmission mitigation.

8 Storage projects that can meet all of the requirements necessary to
9 improve transmission system performance and meet identified needs should be proposed and
10 considered in the TPP. As an active stakeholder in the TPP, SCE will work with the CAISO to
11 determine how energy storage may resolve transmission needs that in the past have been met
12 with more traditional solutions.

13 **E. SCE Has No Preference for Point of Interconnection Beyond Meeting the CPUC’s**
14 **Requirements**

15 SCE does not have a preference for point of interconnection – transmission, distribution,
16 or customer – beyond meeting the CPUC’s established point-of-interconnection minimum
17 requirements.¹⁷ While SCE intends to identify higher-value locations and functions for storage
18 to the best of its ability, the point of interconnection is not necessarily dictated by those
19 parameters. Thus, the interconnection point does not inherently impact SCE’s project
20 preference, other than SCE’s need to achieve the point of interconnection minimums established
21 by the CPUC.

¹⁷ The CPUC established point of interconnection specific storage requirements equal to the customer-connected targets and at least 20% of the transmission and distribution connected targets in Table 2 of D.13-10-040 at 15.

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III.

SCE'S EXISTING ELIGIBLE STORAGE

A. SCE Has a Number of Existing Projects That Are Eligible to Count Towards Its 2014 Storage Target

SCE's existing eligible storage projects are primarily comprised of demonstration projects and customer-side programs. Several of the demonstration projects have planned demonstration periods of two years. However, SCE expects to utilize these storage devices for the entirety of their useful lives. In most cases, after the initial demonstration period, the devices will be redeployed in new applications, likely at new locations.

SCE's customer-side storage programs, including the Permanent Load Shift ("PLS") Program and the Self-Generation Incentive Program ("SGIP"), have many project applications which are expected to be approved and installed by the time of SCE files its next biennial storage Application (anticipated to be submitted on March 1, 2016). Given that customer-side program forecasts are created on an annual basis and the amount of projects installed between the end of the year (December 31, 2015) and the application filing date (March 1, 2016) is not expected to be very large, SCE will only count projects installed by December 31, 2015 towards its 2014 target.¹⁸ In its 2016 Application, SCE will update its storage procurement expectations to account for any differences between the forecasts of storage to be installed and the actual storage installed.

According to the Storage Decision, for existing projects to count towards the utilities' procurement targets, the projects must:

- Demonstrate an ability to meet one or more of the following purposes: grid optimization, integration of renewable energy, or reduction of greenhouse gas emissions;

¹⁸ D 13-10-40, Appendix A, at 4-5.

- Be under contract or installed after January 1, 2010;
- Be operational by no later than the end of 2024;¹⁹ and
- For customer-side projects under qualifying incentive programs, have a forecasted installation date prior to the filing of the 2016 procurement Application.²⁰

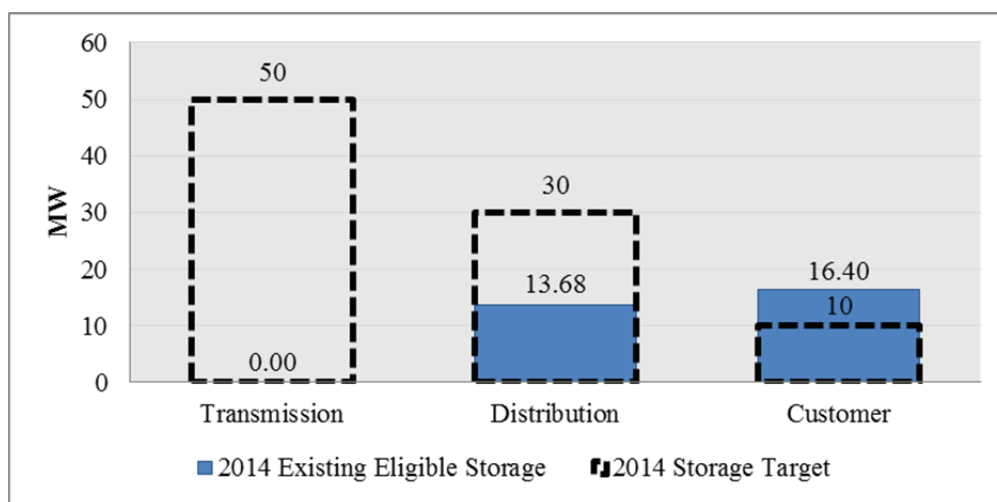
Based on the above requirements, SCE has in its portfolio 30.08 MW²¹ of existing energy storage that is eligible to count towards the 2014 target. Still, as illustrated in Figure III-1 below, SCE will only count 23.68 MW towards its 2014 Energy Storage Procurement target, because 6.40 MW of the customer-connected storage is in excess of the 10 MW target for the 2014 storage procurement cycle; that 6.40 MW of customer-connected storage will be counted towards the 2016 target.

¹⁹ D.13-10-40, at 32.

²⁰ D 13-10-40, Appendix A, at 4-5.

²¹ This total of 30.08 MW does not include procurement of energy storage expected to come through SCE's LCR procurement.

Figure III-1
SCE’s Fulfillment of the 2014 Storage Targets by Grid Domain



This existing storage is shown by point of interconnection in Table III-1, below.

Table III-1
SCE’s Existing Storage Eligible to Count Towards the 2014 Targets

Customer-connected	Distribution-interconnected	Transmission-interconnected
16.40 MW	13.68 MW	0 MW

1. Tehachapi Storage Project

The Tehachapi Storage Project (“TSP”), expected to come online in early Spring 2014, is a demonstration project intended to test one of the world’s largest grid-connected lithium-ion energy storage systems coupled with a smart inverter. The project evaluates the performance of an 8 MW, 4-hour (32 megawatt-hour (“MWh”)) LG Chem Ltd. battery system connected to the distribution grid at the 66 kilovolt (“kV”) level,²² as well as that system’s ability to improve grid performance and integration with large-scale wind-powered electricity generation. The TSP is located on SCE’s Monolith substation on the Antelope-Bailey system. Antelope-Bailey is part of the Tehachapi Wind Resource Area, where up to 4,500 MW of wind resources could come online in the near future. The project team will measure performance under 13 specific operational uses. Most of the operations either (1) shift wind and conventional power to meet peak load and other electricity system needs with stored electricity, or (2) resolve grid instability and capacity issues that result from the interconnection of wind generation resources. This project will also demonstrate the ability of a battery storage system to provide nearly-instantaneous maximum capacity for supply-side ramp rate control to minimize the need for fossil fuel-powered generator operation.

2. Irvine Smart Grid Demonstration Projects

The Irvine Smart Grid Demonstration (“ISGD”) Projects closely replicate and test many of the interlocking pieces of an end-to-end smart grid. The demonstration’s scope spans transmission to distribution to customer premise devices and includes a functioning laboratory for accurately assessing the interoperability of, and interaction between, various smart grid technologies and systems. The ISGD will host several energy storage systems described below:

²² The 66kV Antelope-Bailey system, to which TSP will be attached, is currently controlled by the CAISO and thus considered transmission. However, the East Kern Wind Resource Area project will result in the line becoming part of a radial distribution network by the time TSP comes online. Accordingly, SCE will count TSP towards SCE’s distribution-connected storage target.

1 a) **Residential Energy Storage Unit (“RESU”)**

2 Fourteen LG RESUs have been installed as part of the ISGD. Each RESU
3 contains a 4 kilowatt (“kW”) inverter and 10 kilowatt-hours (“kWh”) of LG Chem Ltd.
4 automotive-grade lithium-ion batteries, with a total capacity of 56 kW. The RESU provides
5 backup to secure loads in the event of an outage, and couples up to 4 kW of photovoltaic (“PV”) solar panels with the battery. These systems combine a number of control mechanisms to allow
6 valuation of various operating or control modes. The RESUs communicate with SCE
7 SmartConnect Meters and a remote RESU Server to gather published prices, instantaneous
8 demand, Demand Responses, and utility control information. Throughout the two-year
9 demonstration project, the RESUs will be operated in six different operating modes to investigate
10 their value on the customer’s energy usage and SCE’s distribution circuit. The RESUs were
11 commissioned between September 23 and October 1, 2013.

13 b) **Community Energy Storage (“CES”)**

14 A CES system manufactured by the S&C Electric Company was installed
15 as part of the ISGD Project and fully commissioned by July 31, 2013. The CES includes a 25
16 kW power conversion system and a total of 50 kWh of Kokam lithium-ion batteries. The CES is
17 controlled remotely using utility communication protocols to a Distributed Energy Manager
18 server. It includes autonomous modes which allow it to actively adjust its real and/or reactive
19 power to affect the local loading of the circuit. The CES is connected to a residential service
20 transformer serving a block of customers, and is also capable of islanding the block of homes by
21 disconnecting from the grid in the event of an outage.

22 c) **Containerized Distributed Storage Unit**

23 Another part of the ISGD is the A123 System large distributed energy
24 storage unit. The 2 MW, 0.5 MWh containerized lithium-ion energy storage unit will allow SCE
25 to explore protection and control strategies on a distribution system with significant reverse
26 power flow capability. Two distribution circuits capable of being operated either radially or as a
27 single loop will help SCE engineers evaluate different strategies of circuit constraint

management. SCE expects the containerized distribution storage unit demonstration project to come online in Spring 2014 and last for six months, after which the system will be redeployed in a different application.

3. Large Energy Storage Test Apparatus (“LESTA”) Station

SCE constructed a testing facility to evaluate promising energy storage systems, facilitate deployment, encourage innovation, and develop practical energy storage-based end-uses. In addition to providing a safe and convenient platform for multi-megawatt storage equipment to be tested under a simulated and controlled environment, the LESTA facility also offers the opportunity for the equipment to be directly exposed to a live 12 kV distribution circuit to observe behaviors under grid-connected, real-life conditions. The station is currently conducting a long-term evaluation of a 2 MW, 0.5 MWh containerized energy storage system manufactured by A123 System. The A123 System unit was commissioned on December 20, 2011.

4. Discovery Science Center

SCE procured a Princeton Power Systems Battery Energy Storage System (“BESS”) for a field demonstration to be sited at the Discovery Science Center. This BESS includes a 100 kW, 500 kWh GE sodium nickel chloride battery. The Discovery Science Center is a medium-sized commercial customer that will use the BESS in a permanent load shifting application to reduce the peak loading (and bill) of the customer. Installation is expected on April 14, 2014 with full commissioning by May 1, 2014.

5. Catalina Island Battery System

A 1 MW, 7.2 MWh sodium-sulfur (NaS) battery system manufactured by NGK Insulators, Co. was installed on the island of Catalina in June 2012. The energy storage system helps reduce emissions from the island’s diesel generators. By dispatching stored energy to respond to rapid load changes, the storage system allows the diesel generators to run at optimal loading with reduced emissions.

1 **6. Vehicle-to-Grid Program at LA Air Force Base**

2 The Los Angeles Air Force Base Vehicle-to-Grid Demonstration Project²³ is
3 designed to study how light-duty plug-in electric vehicle (“PEV”) fleets can use their battery
4 storage to provide energy and ancillary services to the CAISO markets. The Vehicle-to-Grid
5 Program will also review how this type of storage can generate additional revenues in order to
6 reduce the cost difference between PEVs and conventional internal combustion engine vehicles.
7 The PEVs in this project will be interconnected to SCE’s distribution system.

8 SCE expects the project to come online at Los Angeles Air Force Base in the
9 second quarter of 2014 and provide 0.65 MW of capacity. SCE submitted an advice letter and
10 tariff for the pilot project to the CPUC on April 23, 2013; the project became effective on July
11 11, 2013 per Resolution E-4595.²⁴

12 **7. SGIP**

13 **a) Background and Program Overview**

14 The Commission established the SGIP in D.01-03-073 pursuant to Public
15 Utilities Code Section 399.15(b).²⁵ The SGIP provides financial incentives for qualified
16 distribution generation (“DG”) technologies that are installed on the customer side of the utility
17 meter and that serve some or all of a customer’s onsite electric load.²⁶ Incentives offered under
18 the SGIP vary based on the technology and whether the DG technology uses renewable or non-
19 renewable fuel.

23 As described in Advice Letter 2889-E, Apr. 23, 2013.

24 Advice Letter 2889-E, Apr. 23, 2013.

25 Section 399.15(b) of the Public Utilities Code no longer deals with the SGIP. The SGIP is now governed by Pub. Util. Code § 379.5 and § 379.6. (Deerings Supp. 2014). D.01-03-073, Interim Opinion Implementation of Pub. Util. Code § 399.15(b), Paragraphs 4-7; Load Control and Distributed Generation Initiatives, Mar. 27, 2001.

26 At its inception, the SGIP funded solar PV, wind turbines, fuel cells, microturbines, small gas turbines, internal-combustion engines and combined heat and power plants. Assembly Bill 2778 removed all incentives for photovoltaic systems from the SGIP as of January 2007, and provided incentives for photovoltaics through the California Solar Initiative program.

1 In 2008, the Commission adopted D.08-11-044, which allowed advanced
2 energy storage (“AES”) systems that meet certain technical parameters and are coupled with
3 eligible DG technologies to receive incentives under the SGIP.²⁷ In addition to AES systems
4 coupled with eligible SGIP technologies, the Commission granted eligibility to stand-alone AES
5 to participate in the SGIP in D.11-09-015.²⁸

6 **b) Program Forecast**

7 In D.11-12-030, the Commission authorized a budget of \$28 million per
8 year in 2012, 2013, and 2014 for SGIP in SCE’s service territory.²⁹ The remainder of the
9 authorized budget is expected to fund the SGIP through its sunset date and any unallocated SGIP
10 funds will be returned to ratepayers after January 1, 2016.³⁰

11 To date there are 226 AES projects, both stand-alone and coupled with
12 eligible DG technologies, that have received or applied for incentives under the SGIP. Table III-
13 2 shows the committed and pending reservations for AES technologies that applied for SGIP
14 incentives as of December 31, 2013.

Table III-2
Self-Generation Incentive Program Committed and Pending AES Reservations as of
December 31, 2013

Committed Reservation	8.6 MW
Pending Reservation	2.3 MW
Total Reservation	10.9 MW

²⁷ D.08-11-044 at 19 (OP 1).

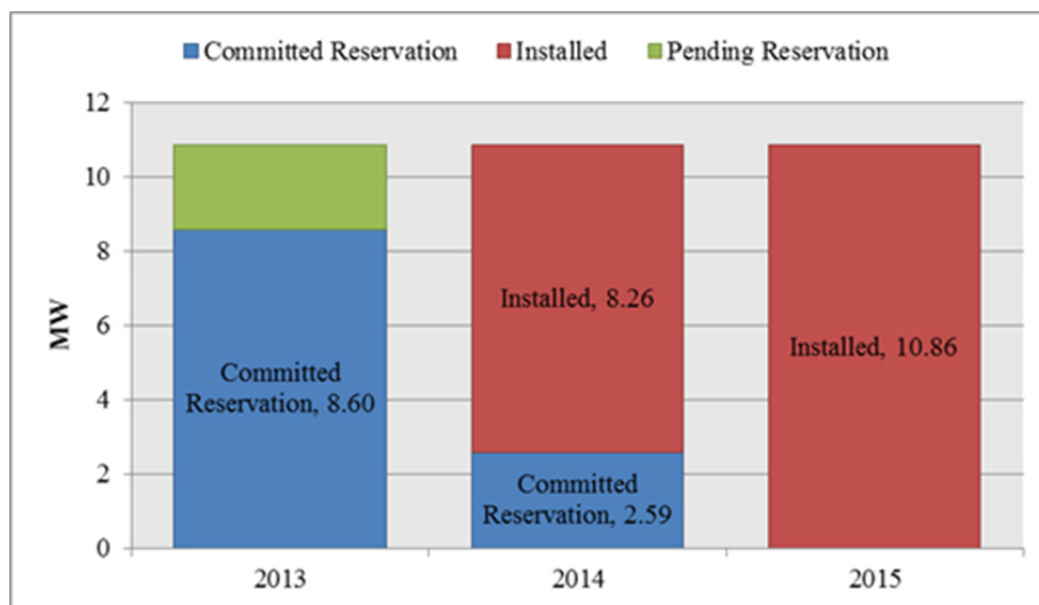
²⁸ D.11-09-015, Decision Modifying the Self-Generation Incentive Program and implementing S.B. 412, September 8, 2011.

²⁹ D.11-12-030, Decision Adopting Self-Generation Incentive Program Annual Budget for 2012, 2013 and 2014, Dec. 15, 2011, at 1.

³⁰ *Id.* at 2; Pub. Util. Code § 379.6 (Deerings Sup. 2014).

In addition, Figure III-2 shows the annual forecast of AES projects through the statutory sunset date of SGIP on January 1, 2016.³¹ Based on the existing project applications, and as shown in Figure III-2, SCE expects 10.86 MW of storage installed as part of SGIP by the end of 2015, all of which is eligible to count towards SCE's 2014 customer-side storage procurement target. SCE will report the actual amount of storage installations realized in SGIP in SCE's next storage procurement application in Spring 2016.

Figure III-2
Self-Generation Incentive Program Annual Forecast of AES Projects



Note: Pursuant to Senate Bill 412 (Stats. 2009, ch. 182), SGIP is scheduled to sunset on January 1, 2016.

8. PLS Program (Installed Before 1/1/2016)

a) Background and Program Overview

In D.12-04-045, the Commission approved a PLS program budget for 2012-2014, and directed the three IOUs to propose a statewide PLS program based on a standard

³¹ The forecast is based on the AES applications received as of December 31, 2013.

1 offer with common design and rules.³² SCE launched the PLS program in its service territory on
2 July 22, 2013.

3 The Statewide PLS program is designed to help customers shift electricity
4 use by offering a one-time upfront incentive, based on the number of kW shifted,³³ to offset
5 initial investments in a thermal energy storage system. Customers are required to shift energy
6 usage during the summer peak hours as defined by each utility. Providing an incentive to invest
7 in a PLS technology helps the utilities reduce the need for peak generation investments, reduces
8 the likelihood of shortages during peak periods, and lowers system costs overall by reducing the
9 need for peaking units.

10 Customers are able to reserve incentives for PLS projects on a first-come,
11 first-served basis, as long as funding is available. Resolution E-4586 adopted a standardized
12 PLS incentive level of \$875/kW across the IOUs.³⁴

13 **b) Program Forecast**

14 D.12-04-045 authorized a \$14 million budget to implement the PLS
15 program from 2012 through 2014 in SCE's service territory. Since SCE's PLS program launch
16 on July 22, 2013, eight projects have applied for PLS incentives. Table III-3 shows the
17 committed and pending reservations for PLS program incentives as of December 31, 2013.

³² D.12-04-045, Decision Adopting Demand Response Activities and Budgets, Apr. 19, 2012, at 226 (OP 60, 61).

³³ The incentive is based on designed and verified kW shifted (per feasibility study and post-installation inspection approval).

³⁴ Resolution E-4586, May 9, 2013, at 7.

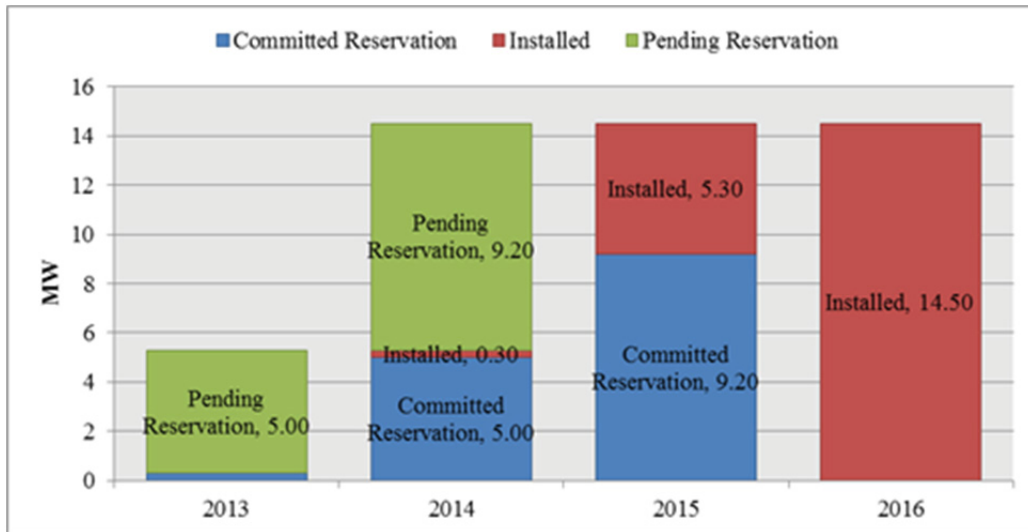
Table III-3
Permanent Load Shifting Program Committed and Pending Reservations
as of December 31, 2013

Committed Reservation	0.3 MW
Pending Reservation	5.0 MW
Total Reservation	5.3 MW

Figure III-3 shows the annual forecast of PLS projects through March 1, 2016.³⁵ As shown in Figure III-3, SCE expects 5.3 MW of storage installed as part of the PLS program by the end of 2015, all of which is eligible to count towards SCE's 2014 customer-side storage procurement target. SCE will report the actual amount of storage installations realized in the PLS program in SCE's next storage Application in Spring 2016.

³⁵ The forecast is based on the PLS program applications received from July 22, 2013 through December 31, 2013.

Figure III-3
Permanent Load Shifting Program Annual Forecast



B. SCE Has a Number of Storage Projects Planned or Under Consideration That Should Count Towards Its Future Storage Targets

1. Distributed Optimized Storage (“DOS”) Project

The DOS Project aims to demonstrate the use of multiple energy storage devices deployed at the distribution feeder level. The devices will work in concert to provide grid support functionality while minimizing the energy rating of the total distributed system. SCE expects approximately 1 MW, 2 MWh of distributed optimized energy storage to be deployed by the end of 2015. Because SCE has not yet made a purchase order for the equipment for the DOS project before submitting this Application,³⁶ SCE expects to count this project towards its 2016 storage target.

³⁶ In order to count utility-owned storage towards a procurement target, the Storage Decision requires a specific procurement commitment, such as a purchase order, to be made. See D.13-10-040, Appendix A, at 4.

1 **2. Distribution Energy Storage Integration (“DESI”)**

2 The DESI project is piloting the use of energy storage devices on the distribution
3 circuit for grid reliability support. The energy storage devices will be used primarily to provide
4 grid support via circuit loading relief and eventually voltage regulation. The pilot will collect
5 operational data to determine to what extent value streams may be captured.

6 SCE plans to implement three separate 2 MW, 4 MWh DESI projects over the
7 next four years. The first projects, referred to as “DESI 1” and “DESI 2,” totaling 4 MW, are
8 expected to become operational in November 2014 and February 2016 respectively, and thus
9 should count towards the 2016 storage targets. “DESI 3” is not expected to come online until
10 February 2018 and SCE expects it to count towards the 2018 storage target.

11 **3. PLS Program (Installed after 12/31/2015)**

12 As discussed in Section III.A.10, SCE’s PLS program is funded through the end
13 of 2016. SCE will count the projects that are currently in the application process and forecasted
14 to be installed before December 31, 2015 towards its 2014 storage target. Any *additional* PLS
15 installations that occur between December 31, 2015 and the expected 2018 storage Application
16 filing date of March 1, 2018, should count towards SCE’s 2016 storage target. Accordingly,
17 SCE expects to count the difference between expected installations occurring by the end of the
18 program on December 31, 2016, and the expected installations by December 31, 2015 towards
19 the 2016 targets. SCE has 5.3 MW of existing projects, which will be installed by the end of
20 2015, and expects that a total of 14.5 MW of PLS will be installed by the end of 2016. SCE
21 expects to count the difference of 9.2 MW towards the 2016 targets. The PLS storage forecasts
22 will be updated based on actual data in the 2016 storage Application.

1 **C. SCE's Existing Procurement Mechanisms Will Produce Additional Eligible Storage**

2 **1. LCR RFO**

3 In D.13-02-015, the Commission authorized SCE to procure up to 1800 MW of
4 resources, of which at least 50 MW must be energy storage.³⁷ As shown in Figure III-4 below,
5 up to 650 MW of the potential 1800 MW of capacity may come from storage projects. SCE is
6 currently evaluating bids received in its LCR RFO and expects to bring contracts to the CPUC
7 for approval in August 2014.³⁸ In Track 4, SCE requested procurement authorization for an
8 additional 500 MW of new resources in the Western Los Angeles Basin from all sources,
9 including energy storage.³⁹ The Track 4 PD discussed above would authorize an additional 500
10 to 700 MW of new resources in the Western Los Angeles Basin.⁴⁰ The PD would require 400
11 MW of this amount to be procured from preferred resources, including energy storage, as defined
12 in D.13-10-040. The PD would allow procurement of up to 300 MW of new resources in the
13 Western Los Angeles Basin to be procured from all sources, which could also include energy
14 storage, as defined in D.13-04-010. The PD would also allow SCE to acquire new large-scale
15 pumped storage hydro resources as preferred resources (although SCE cannot count them as
16 energy storage for the purposes of this docket).

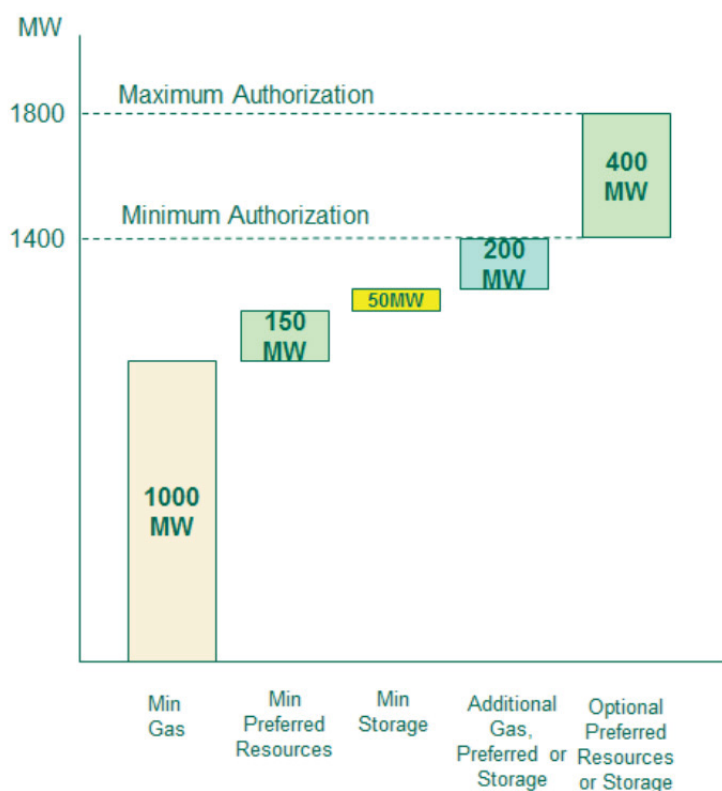
³⁷ D.13-02-015, Decision Authorizing Long-Term Procurement for Local Capacity Requirements, Feb. 13, 2013, at 130-131 (OP 1).

³⁸ Details of the LCR RFO are posted on SCE's website, *available at* <http://www.sce.com/wps/portal/home/procurement/LCR-RFO>.

³⁹ R.12-03-014, Track 4 Testimony of Southern California Edison Company, August 26, 2013, at 8.

⁴⁰ PD in R.12-03-014, dated Feb. 11, 2014, at 1.

Figure III-4
SCE's Track 1 LCR RFO Capacity Authorized for Purchase



SCE asks the Commission to apply the Commission-approved minimum of 50 MW of LCR storage procurement to its 2014 storage procurement target. While the Storage Decision states that “the IOUs may count storage projects authorized in other Commission proceedings towards meeting their interim procurement targets *once the contract* for that project is approved by the Commission (emphasis added),”⁴¹ the unique timing associated with SCE’s LCR RFO makes an exception to this requirement appropriate. SCE has already obtained storage project offers through its LCR RFO, and SCE will execute storage contracts before the start of its storage-specific solicitation in December 2014. Additionally, the Commission should

⁴¹ D.13-10-040, at 34.

1 recognize SCE for its early procurement of storage by allowing the minimum LCR RFO storage
2 to count towards the 2014 targets. If the Commission does not allow SCE to count the 50 MW
3 of LCR RFO storage, then SCE will have to procure an additional 50 MW on top of its 90 MW
4 requirement—totaling 140 MW of storage—in the 2014-2015 timeframe when prices for storage
5 technologies are expected to be considerably higher than in later years. In contrast, Pacific Gas
6 and Electric Company (“PG&E”) will only have to procure 90 MW of storage in the same
7 timeframe even though PG&E has identical storage targets as SCE. The Commission should
8 reward SCE for its early efforts and allow SCE to count the 50 MW procured in its LCR RFO.

9 SCE is not asking the Commission to allow all LCR RFO storage to count
10 towards its 2014 storage procurement target, but is seeking only the minimum of 50 MW. This
11 request is reasonable because the 50 MW of procurement is the Commission-stated target for the
12 LCR while the total amount of storage procured through the LCR RFO will not be known until
13 the Commission approves contracts, which will likely occur after the 2014 Energy Storage RFO
14 is launched. Additionally, by allowing only the minimum of 50 MW to count towards SCE’s
15 2014 targets, the Commission will appropriately reward SCE for its early procurement of storage
16 while still ensuring that SCE will utilize its 2014 Energy Storage RFO to procure additional
17 storage.⁴² Any LCR RFO storage procured in addition to the 50 MW minimum would count
18 towards SCE’s 2016 storage procurement targets.

19 **2. Renewables Portfolio Standard (“RPS”) Request for Proposals (“RFP”)**

20 Currently, SCE has an open RPS RFP soliciting renewable resources to meet RPS
21 needs.⁴³ In the RPS solicitation, SCE is considering procuring combined renewable and storage
22 projects. Accordingly, SCE may procure some eligible storage through its RPS RFP.

⁴² If the Commission allowed all of SCE’s LCR RFO storage to count towards the 2014 targets, it is possible that SCE would reach its 90 MW minimum without needing to procure additional storage through its 2014 Energy Storage RFO.

⁴³ Details of the RPS RFO are posted on SCE’s website available at <http://on.sce.com/rps>.

1 **3. Preferred Resources Pilot (“PRP”)**

2 As proposed in SCE’s testimony on Track 4 of the Long Term Procurement
3 Plan,⁴⁴ SCE plans to create a Preferred Resources Pilot to procure and study preferred resources
4 and storage in the areas served by Johanna and Santiago substations. To date, SCE has used
5 preferred resources to meet specific compliance targets, such as the RPS, but the PRP will allow
6 SCE to understand how preferred resources and storage can be deployed to effectively meet
7 reliability needs. The PRP will provide an additional opportunity for SCE to procure energy
8 storage resources, which could be eligible to meet SCE’s storage procurement targets.

⁴⁴ Track 4 Testimony of Southern California Edison Company, R.12-03-014, August 26, 2013, at 49.

D. SCE's Forecast of Biennial Procurement Is Adjusted for Existing Storage

After considering the aforementioned existing and planned storage, SCE's forecasted storage procurement, in megawatts, are adjusted in Table III-4, below.

Table III-4
SCE's Forecasted Storage Procurement

	2014			2016		
(MW)	CPUC-Set Targets	Existing*	Minimum Expected Procurement	CPUC-Set Targets	Existing**	Minimum Expected Procurement
Transmission	50.00	0.00	50.00	65.00	0.00	65.00
Distribution	30.00	13.68	16.32	40.00	5.00	35.00
Customer	10.00	10.00	0.00	15.00	15.00	0.00
Total	90.00	23.68	66.32	120.00	20.00	100.00
	2018			2020		
(MW)	CPUC-Set Targets	Existing	Minimum Expected Procurement	CPUC-Set Targets	Existing	Minimum Expected Procurement
Transmission	85.00	0.00	85.00	110.00	0.00	110.00
Distribution	50.00	2.00	48.00	65.00	0.00	65.00
Customer	25.00	0.60	24.40	35.00	0.00	35.00
Total	160.00	2.60	157.40	210.00	0.00	210.00
*SCE's 2014 existing customer storage exceeds the 10 MW target, so the extra 6.40 MW is shifted to apply to SCE's 2016 existing customer storage.						
*SCE's 2014 existing storage forecasted here does not include the minimum 50 MW of LCR storage that is expected to be procured by Fall 2014.						
** SCE's 2016 existing customer storage exceeds the 15 MW target, so the extra 0.60 MW is shifted to apply to SCE's 2018 existing customer storage.						
Note: the "minimum expected procurement" is based on the CPUC-set targets net of existing storage, but SCE retains the flexibility to shift up to 80% of the MWs between the transmission and distribution categories.						

As stated in Section II.E, SCE does not currently have a preference for interconnection at the distribution or transmission level. Therefore, SCE's forecasted storage procurement in 2016, 2018, and 2020 as shown in Table III-4 simply reflects the CPUC's storage targets, with planned eligible storage projects subtracted, and does not indicate any shifting between the transmission and distribution buckets that may occur in the future.

1 As discussed in Section III.C.1, SCE is required to procure 50 MW or more of energy
2 storage through its LCR RFO in 2014, which should count towards the 2014 storage targets.⁴⁵
3 Given that SCE does not yet have final contracts from its LCR RFO, it is unclear at this time
4 how many of the storage projects will be interconnected at the distribution or transmission level.
5 Accordingly, SCE does not include the storage from the LCR RFO in Table III-4 even though it
6 does expect to have additional storage to count towards the 2014 target.

⁴⁵ D.13-02-015, at 2.

1 IV.

2 **PROCUREMENT IN ADDITION TO EXISTING ELIGIBLE STORAGE**

3 SCE will seek to meet many of its energy storage requirements through its planned
4 Energy Storage RFO. Sections IV.A and IV.B below describe SCE's Energy Storage RFO,
5 detailing the valuation and selection process, minimum requirements for participation, the RFO
6 timeline, and more. SCE does not anticipate proposing significant changes to the details
7 provided here, but SCE retains the flexibility to make alterations as it implements the lessons
8 learned from its LCR RFO.

9 However, SCE will not limit its procurement efforts to the Energy Storage RFO. There
10 may be cost-competitive and market-transformative storage opportunities outside of an RFO.
11 SCE will consider potential bilateral contract opportunities, utility-owned storage, and customer
12 programs, as described in Sections IV.C, IV.D, and IV.E, respectively.

13 Because SCE is committed to the Commission's goals both to transform the energy
14 storage market⁴⁶ and to encourage electric vehicle adoption,⁴⁷ SCE will continue to evaluate
15 potential electric vehicle storage projects that can fulfill both of these goals. These electric
16 vehicle storage projects may be pursued through any of the identified procurement mechanisms
17 including the Energy Storage RFO, bilateral contracts, utility-owned storage, or customer
18 programs.

⁴⁶ Assigned Commissioner's Ruling Proposing Storage Procurement Targets and Mechanisms and Noticing All-Party Meeting, June 10, 2013, at 3 ("this ACR suggests procurement targets for energy storage with the goal of market transformation").

⁴⁷ Order Instituting Rulemaking to Consider Alternative-Fueled Vehicle Programs, Tariffs, and Policies, November 22, 2013, at 2 ("The Commission opens this rulemaking to address issues relating to the expanding use of alternative-fueled vehicles (AFV) in California. In particular, the Commission is continuing the work it started in Rulemaking (R.) 09-08-009, to support California Executive Order B-16-2012, which set a target of 1.5 million zero-emission vehicles (ZEVs) on the roads in California by 2025.").

1 **A. Valuation and Selection Process**

2 The Storage Decision allows each utility to use its proprietary valuation and selection
3 process for determining winning offers in the storage RFO.⁴⁸ The Storage Decision also directs
4 the utilities to create a “consistent evaluation protocol” (“CEP”) for the benchmarking and
5 reporting of storage offers across the IOUs, as discussed in more detail in Section IV.A.2
6 below.⁴⁹ The utility’s proprietary process will be used for offer selection, while the CEP will be
7 used only for reporting. Still, these different valuation processes consider many of the same
8 quantitative and qualitative attributes for determining the relative value of different storage
9 offers.

10 **1. SCE’s Specific Valuation and Selection Process**

11 SCE’s Energy Storage RFO evaluation, like SCE’s other RFO evaluations,
12 involves five major steps: (a) developing price forecasts and scenarios, (b) determining the
13 revenue streams of benefits and costs, (c) calculating present value and adding up all revenue
14 streams, (d) considering qualitative factors, and (e) selecting contracts. While the net present
15 value (“NPV”) is the quantitative factor that determines the relative costs and benefits of the
16 offers, the selection process also carefully considers the qualitative characteristics of the offers.
17 SCE’s process for valuation and selection is detailed below.

18 **a) Step 1: Develop Price Forecasts and Scenarios**

19 SCE will prepare probabilistic forecasts for day-ahead energy prices and a
20 single-point forecast for Resource Adequacy (“RA”) prices, ancillary services (“AS”) prices, and
21 real-time energy prices over the time horizon necessary to evaluate the offers. A single-point
22 forecast contains only the expected value of prices, which is appropriate for RA, AS, and real-
23 time prices. However, SCE utilizes probabilistic forecasts for day-ahead energy because they

⁴⁸ D.13-10-040, at 63.

⁴⁹ D.13-10-040, at 63.

1 can be used to build probability distributions of price outcomes (i.e. volatility and mean
2 reversion parameters) that are used to calculate the extrinsic value of dispatchable resources.

3 **b) Step 2: Determine Revenue Streams**

4 The quantitative components included in determining the value of offers
5 include both benefits and costs. The benefits include RA value, day-ahead and real-time energy
6 market value, AS market value, and grid upgrade deferral value. The costs include fixed and
7 variable contract payment costs, debt equivalence, and transmission and distribution upgrade
8 costs, among others.

9 Given current market, technology, and regulatory structures, some of the
10 quantitative factors are calculated differently for “in-front-of-the-meter” devices and “behind-
11 the-meter” devices. In-front-of-the-meter devices are treated as supply-side resources that
12 commonly participate in the CAISO markets today. These devices have CAISO meters and can
13 respond to CAISO controls. Behind-the-meter devices, by contrast, are directly connected to
14 customer facilities and do not have CAISO meters. Behind-the-meter devices cannot participate
15 in the CAISO markets, and thus cannot receive benefits such as ancillary revenues.

16 **(1) Resource Adequacy Benefit**

17 Storage placed on the grid can have RA benefits provided the
18 storage device meets the CPUC’s and the CAISO’s RA eligibility requirements and the device
19 has been found fully deliverable by the CAISO. In-front-of-the-meter devices may qualify as
20 eligible supply-side RA capacity, while behind-the-meter devices may provide demand-side RA
21 benefit. This necessitates different mechanisms for determining the RA quantity for the two
22 categories of devices.

23 Determining the RA quantity and resulting value of an in-front-of-
24 the-meter device is relatively uncomplicated. For each month of the offer’s contract, the RA
25 value is the quantity of qualifying RA capacity multiplied by the forecasted capacity price. SCE
26 will use the most current RA counting rules when ascribing qualifying RA capacity, including
27 the CAISO rules for full capacity deliverability. In the RA proceeding, CPUC staff proposed RA

1 counting rules for energy storage.⁵⁰ If no specific rules are in place for storage devices, SCE will
2 apply the dispatchable countability standards as currently applied to pumped storage hydro
3 resources.

4 RA quantity determination for a behind-the-meter device is less
5 direct. When a device is behind-the-meter, the RA quantity is derived from the peak load
6 reduction that occurs at the meter where the device resides. This peak load reduction amount is
7 then translated into an RA requirement reduction quantity. Since an RA requirement reduction
8 depends upon the reliable operational deployment of storage devices, SCE will determine
9 whether or not each behind-the-meter device can provide reliable demand-side RA capacity. RA
10 quantities ascribed to demand-side installations will also benefit from the reserve margin
11 modifier of 115%. Specifically, this modifier increases the RA quantity to account for the
12 reduction of both the peak load RA obligation as well as the 15% reserve margin required in the
13 RA program. This causes demand-side resources to receive relatively more benefit than supply-
14 side RA capacity for each MW of countable RA, and is consistent with how demand-side
15 resources are currently treated.

16 (2) **Day-Ahead Energy, Real-Time Energy, and Ancillary Services**
17 **Benefits**

18 Valuation of revenues from day-ahead energy, real-time (“RT”) energy, and AS are interdependent and thus must be both modeled and discussed collectively.
19 Some storage projects may provide specific operating profiles, in which case SCE will simply
20 use the specified operating profiles and the forecasted prices during the units’ operation to
21 calculate revenues. Still, many offers will allow SCE to dispatch the resources and determine the
22 operating profile of the storage devices, which will then determine the devices’ revenues from
23 day-ahead energy, RT energy, and AS. These dispatchable offers require SCE to use a more
24

⁵⁰ See Staff Proposal on Qualifying Capacity and Effective Flexible Capacity Calculation Methodologies for Energy Storage and Supply-Side Demand Response Resources, dated January 16, 2013, in R.11-10-023.

1 complex optimization model to determine the best use of the device and associated maximization
2 of revenues. The objective function of SCE's optimization model is to maximize the day-ahead,
3 RT, and AS revenue over the duration of the contract while operating within the device's
4 operational constraints. These constraints can include capacity, charge and discharge time, and
5 unit degradation. The optimization model will yield the forecasted operating profile over the life
6 of the contract and the associated forecast of day-ahead, RT, and AS revenues. For some storage
7 offers, these revenues will be the primary quantitative benefits in the valuation.

8 **(3) Grid Upgrade Deferral Benefit**

9 Energy storage resources may receive a benefit associated with
10 incidental distribution upgrade deferral costs depending on how they are deployed. SCE may
11 incorporate an estimate of savings into its valuation if it meets all four of the reliability asset
12 requirements discussed in Section II.D.2.b.

13 SCE does not plan to apply any transmission deferral benefits for
14 storage resources since such benefits are difficult to quantify and because the CAISO is
15 ultimately responsible for identifying and resolving transmission needs.⁵¹ However, where a
16 specific area has been identified by the CAISO, SCE will consider the location of specific offers
17 as a qualitative factor, in order to recognize the potential use of energy storage to meet LCR
18 needs. In particular, SCE may give extra consideration to offers in the vicinity of its Johanna
19 and Santiago substations in Orange County, a target area for SCE's PRP.

20 **(4) Contract Payment Cost**

21 Contract payment costs can vary from offer to offer, but they
22 typically consist of a fixed payment stream, such as monthly capacity payments, as well as
23 variable payment streams that depend upon the use of the device. Fixed payment streams are
24 calculated directly according to contractual obligations. Variable payment streams, such as a

⁵¹ See Section II.D.3 on the CAISO's Transmission Planning Process.

variable operations and maintenance (“VOM”) and charging costs, are modeled directly into the objective function of the optimization program used for valuation.

(5) Debt Equivalence Cost

Debt equivalence is the term used by credit rating agencies to describe the fixed financial obligation resulting from long-term purchased power contracts. Pursuant to D.04-12-048, the Commission permits utilities to recognize costs associated with the effect debt equivalence has on the utilities’ credit quality and cost of borrowing in their valuation process. Additionally, D.08-11-008 authorized the IOUs to continue recognizing the balance sheet impact of debt equivalence when valuing Power Purchase Agreements. Accordingly, SCE considers debt equivalence in its valuation process.

(6) Transmission and Distribution Upgrade Costs

Some projects do not have existing interconnections to the electric system. Others may have existing interconnections that are insufficient for a proposed expansion of existing facilities. For these projects, SCE includes the transmission and distribution system upgrade costs in its valuation. Required interconnection studies, discussed further in Section IV.B.6, will provide estimates for the system upgrade costs.

(7) Credit and Collateral Adder Cost

Counterparties may seek to negotiate credit and collateral requirements that are different from SCE’s pro forma requirements. In doing so, there is no longer cost neutrality, or a “level playing field,” in terms of default exposure amounts across the offers. In these cases, SCE will calculate a cost to the offer based on the incremental exposure created by the negotiated terms.

(8) Transmission Congestion and Losses

SCE will consider the locational attributes of the resource that may impact its energy value. Locational attributes include marginal cost of congestion and marginal cost of losses.

1 **(9) Distribution Loss Factors**

2 SCE will consider distribution loss factors for projects connecting
3 to the distribution system. These factors will be used to adjust the energy amounts of the
4 resource, and are based on the project's interconnection voltage.

5 **(10) Market Participation Cost**

6 SCE will consider costs associated with participating in the CAISO
7 markets. For example, in order to arbitrage the day-ahead and RT market, the storage device
8 must overcome the difference between the day-ahead and RT Grid Management Charge cost.⁵²

9 **(11) GHG Compliance Cost**

10 SCE will consider introducing a GHG compliance cost for those
11 devices that directly generate GHG emissions. For example, a storage device that compresses
12 natural gas may have GHG compliance costs for methane that leaks out of the unit. Most storage
13 devices do not directly generate GHGs, however, and so the only relevant GHG costs will
14 already be embedded in energy prices.

15 **(12) Other Benefits and Costs**

16 If SCE can reasonably calculate estimates of other costs and/or
17 benefits that are directly attributable to an offer, then these estimates will be included in the
18 quantitative valuation, and ultimately, in the offer's NPV.

19 **c) Step 3: Calculate Present Value and Add Up All Revenue Streams**

20 All benefit and cost streams are netted and discounted by an annual
21 discount factor to yield a single NPV. SCE uses a standard 10% discount rate for its NPV
22 calculations.

⁵² For more information on the Grid Management Charge see the CAISO website, *available at*
<http://www.caiso.com/informed/Pages/StakeholderProcesses/Budget-GridManagementCharge.aspx>

1 **d) Step 4: Consider Qualitative Factors**

2 In addition to the benefits and costs quantified during the valuation
3 process, SCE assesses non-quantifiable characteristics of the offers. SCE will consider
4 qualitative characteristics such as project viability and project diversity leading to market
5 transformation in determining its final selection of offers.

6 **(1) Project Viability**

7 AB 2514 requires that storage projects procured under the
8 Commission's procurement targets are viable.⁵³ SCE also prefers that its contracted projects are
9 viable in order to prevent unnecessary contract administration costs. Accordingly, project
10 viability is an important consideration in the valuation and selection of offers. In determining
11 winning offers, SCE will consider measures of viability including technological feasibility,
12 developer experience, and financing and interconnection progress. While SCE sets some
13 minimum viability requirements, such as completion of an interconnection study,⁵⁴ SCE
14 encourages developers to go beyond the minimums to demonstrate that their projects will be
15 successful.

16 **(2) Project Diversity Leading to Market Transformation**

17 As discussed in Section II.B above, SCE supports the
18 Commission's goal of storage market transformation. Accordingly, SCE plans to procure energy
19 storage projects that fill a variety of end-uses. To the extent that a project helps promote market
20 transformation by contributing to a diversity of end-uses or otherwise, SCE would consider this a
21 favorable attribute.

22 **(3) Other**

23 Other benefits and costs provided by storage devices and other
24 resources are not accounted for in SCE's quantitative valuation. Blackstart capability, for

⁵³ Pub. Util. Code § 2836(a)(1).

⁵⁴ See Section IV.B.5.

1 example, is a service for which SCE currently has no need. Accordingly, SCE will not associate
2 a quantitative benefit with a service for a product that it does not need. Still, if two offers are
3 otherwise equal, the provision of back-up blackstart may be a qualitative factor that makes one
4 offer more favorable than the other. Other potential benefits and costs will be similarly
5 considered by SCE in determining the final selection of offers.

6 **e) Step 5: Select Contracts**

7 SCE will list all offers in order of quantitative merit based on a NPV per
8 MW metric. Then, given the quantity of storage needed to meet SCE's storage procurement
9 targets, SCE will review the highest-value projects that fill those targets as well as projects that
10 are on the margin. If, in SCE's judgment, the qualitative comparisons discussed in Section
11 IV.A.1.d favor an alternative contract that is not necessarily valued highest by the quantitative
12 metric, then SCE may choose the alternative contract over the marginal alternatives. As
13 indicated in the RFO Instructions in Appendix B,⁵⁵ all selections will be reviewed with an
14 Independent Evaluator ("IE") and SCE's Procurement Review Group.

15 **2. Joint IOU Consistent Evaluation Protocol**

16 The Storage Decision directs the utilities to create a CEP to use for benchmarking
17 and reporting purposes across the IOUs.⁵⁶ In a collaborative effort with Energy Division, the
18 IOUs developed a CEP, which is attached in Appendix C. The CEP describes the protocol and
19 format for reporting all short-listed storage offers to the CPUC. The CEP also contains a
20 spreadsheet with quantitative and qualitative comparison metrics that the IOUs will provide to
21 the CPUC. The CEP establishes standardized planning assumptions, which are used to calculate
22 the quantitative value, thus allowing the CPUC to access offers across utilities, which otherwise
23 use different proprietary assumptions for project valuation. As stated in the Storage Decision,
24 the CEP will not be used for the IOUs' selection of storage contracts; instead, the CEP will be

⁵⁵ See Appendix B, Article 4.

⁵⁶ D.13-10-040, at 63.

1 used as a tool for the CPUC to understand and compare offers across different utilities and end-
2 uses.⁵⁷

3 **B. 2014 Energy Storage RFO**

4 In accordance with the Storage Decision, SCE plans to launch an “Energy Storage RFO”
5 by December 1, 2014. The solicitation is expected to take around ten months, so SCE anticipates
6 signing contracts around September 2015. SCE will leverage experience from the LCR RFO,
7 and intends to update the documents and processes based on lessons learned in the LCR RFO.
8 Details on the 2014 Energy Storage RFO can be found in in the following sections of the storage
9 testimony, in Appendix B of the storage testimony, and on SCE’s website at:

10 <http://on.sce.com/energystoragerfo>.

11 **1. Products to be Solicited**

12 The LCR RFO required that products be eligible to count as Local Resource
13 Adequacy in either the Western Los Angeles Basin subarea of the Los Angeles Basin or the
14 Moorpark subarea of the Big Creek/Ventura subarea. In contrast, SCE’s 2014 Energy Storage
15 RFO is not intended to fill any one specific grid need. The Energy Storage RFO, therefore, will
16 be open to any products that meet a) the definition of Energy Storage as provided in the Storage
17 Decision, b) at least one of the CPUC’s operational requirement of grid optimization, renewable
18 integration, or GHG reduction⁵⁸ and c) the solicitation requirements as set forth in the RFO
19 Instructions in Appendix B.1. SCE will only solicit storage owned by third parties in the 2014
20 Energy Storage RFO; SCE will not accept offers that contemplate the purchase of the energy
21 storage project by SCE.

22 **2. Solicitation Timeline**

23 SCE’s Energy Storage RFO is scheduled to launch by December 1, 2014, with
24 selected final offers expected to be signed within 10 months, i.e., approximately September 30,

⁵⁷ *Id.*

⁵⁸ See Section II.C for more on the CPUC’s operational requirements.

1 2015.⁵⁹ Other key dates include a Bidder’s Conference in December 2014, indicative offers due
2 in February 2015, shortlist notification in April 2015, and contract negotiations from April to
3 August of 2015.

4 **3. Solicitation Structure**

5 SCE proposes to conduct the Energy Storage RFO in two rounds. The first round
6 will begin with an initial submittal of indicative offers followed by negotiations of contract terms
7 with a sub-set of “short-listed” offers. In the second round, all bidders that are able to reach a
8 form of agreement with SCE will be eligible to submit a final binding offer. Based on these final
9 offers, SCE will perform an evaluation and select with whom SCE will sign final agreements.

10 Although SCE will have developed pro forma agreements, SCE intends to solicit
11 offers from a broad range of energy storage technologies, including those that may be installed
12 and operated behind-the-meter and in-front-of-the-meter. If SCE receives offers that cannot
13 conform to the pro forma agreement, then SCE will work with the counterparty to develop an
14 appropriate form of agreement.

15 **4. CPUC Approval of Contracts**

16 Once SCE signs final agreements with bidders in the 2014 Energy Storage RFO,
17 SCE will seek the CPUC’s approval of those contracts. SCE requests that the Commission direct
18 SCE to file Tier III advice letters for approval of the contracts, similar to the RPS solicitations.
19 Tier III advice letters will allow SCE to connect storage projects to the grid in a more timely
20 fashion (as compared to a lengthier application process).

21 **5. Safety**

22 Consistent with SCE’s focus on safety, SCE’s pro forma documents require that
23 sellers provide SCE with a safety report from an independent engineer prior to commencing any
24 construction activities on project sites. The report must certify that seller has a written plan for

⁵⁹ See Appendix B, Article 3.01, for the draft solicitation timeline.

1 the safe construction and operation of the energy storage facilities in accordance with prudent
2 electrical practices.

3 Additionally, SCE's pro forma documents provide that sellers shall operate the
4 energy storage facility in accordance with prudent electrical practices. As summarized below,
5 the pro forma documents include many provisions related to safety.

- 6 1. Seller must furnish and install all equipment necessary to prevent, suppress
7 and contain any fire, flooding, explosion, leak of hazardous material or other
8 injury or damage at the site ("Prevention Equipment").
- 9 2. Seller shall furnish and install all Protective Apparatus⁶⁰ as SCE reasonably
10 determines to be necessary for proper and safe operation of the project in
11 parallel with the distribution system and/or CAISO Grid.
- 12 3. Seller shall maintain records associated with protective devices.
- 13 4. SCE or the CAISO may require seller to demonstrate to SCE's reasonable
14 satisfaction the correct calibration and operation of seller's Protective
15 Apparatus any time SCE or the CAISO has reason to believe that said
16 Protective Apparatus may impair the integrity of the distribution system
17 and/or CAISO Grid.
- 18 5. Seller shall inspect, maintain, and repair the project, and any Prevention
19 Equipment, in accordance with applicable industry standards and prudent
20 electrical practices.

⁶⁰ "Protective Apparatus" means control devices (such as meters, relays, power circuit breakers and synchronizers) specified in the interconnection agreement or related agreement for the project.

6. Seller shall maintain and make available to SCE and the CPUC, or any division thereof, records including logbooks, demonstrating that the project is operated and maintained in accordance with prudent electrical practices.
7. Seller is obligated to provide insurance for workers' compensation, employer's liability, commercial general liability, commercial automobile liability, pollution liability, and umbrella liability.
8. Obligation that the seller provides SCE with certification from an independent engineer that the design and construction of the project was carried out by the original equipment manufacturer or other competent organization.
9. If applicable, seller shall be (i) responsible for complying with any NERC Reliability Standards, including registration with NERC as the "Generator Operator" or other applicable category under the NERC Reliability Standards and implementation of all applicable processes and procedures required by FERC, NERC, WECC, CAISO or other governmental authority for compliance with the NERC Reliability Standards; and (ii) liable for all penalties assessed by FERC, NERC (through WECC or otherwise) or other governmental authority for violations of the NERC Reliability Standards by the project or seller, as "Generator Operator" or other applicable category.
10. Seller is solely responsible for all environmental costs, which include costs associated with the disposal and clean-up of hazardous substances introduced to the site, and the decontamination or remediation, on or off the site of the project, necessitated by the introduction of such hazardous substances on the site of the project.

6. Interconnection Studies

SCE's 2014 Energy Storage RFO will require projects that export power to the grid to provide a completed Independent Study Process ("ISP") System Impact Study, Fast Track Response Letter, or Phase I Queue Cluster interconnection study by the submission of a final offer. Projects that are seeking full deliverability in order to provide Resource Adequacy must enter the Queue Cluster beginning April 1, 2014 and ending April 30, 2014 in order to obtain an interconnection study in time for final offers.⁶¹

SCE has a strong interest in procuring viable projects that have a high probability of coming online. Having an interconnection cost estimate is a key component of project viability. The only way to obtain an interconnection cost estimate is through an interconnection study and SCE is providing enough advanced notice to the market through this Storage Application that developers can enter the appropriate interconnection process. For any project desiring full deliverability designation, FERC interconnection tariffs dictate only one study path – the Queue Cluster Study process. In addition, annually, there is a one-month window for a project to enter that process. Because the 2014 Queue Cluster window falls soon after the submission of this application (in April), some developers submitting through this process may have difficulty meeting the deadline. Still, requiring interconnection studies maximizes the benefit for both developers and SCE by focusing SCE's RFO efforts on projects with interconnection cost estimates, a key indicator in identifying projects that have a higher likelihood of coming to fruition. Moreover, if a project is unable to submit an interconnection request for the 2014 Queue Cluster, it still may be eligible to participate in SCE's Storage RFO without full deliverability if it qualifies for an ISP System Impact Study or Fast Track Response Letter. Additionally, many of the project developers behind the more than 500 storage offers

⁶¹ The Queue Cluster Process timeline is set by the CAISO tariff. *See* California Independent System Operator Corporation Fifth Replacement Tariff, November 5, 2012, at Appendix DD, Section 3.3.1.

1 that SCE received through its 2013 LCR RFO are likely prepared, if not already planning, to
2 enter the 2014 Queue Cluster.

3 While interconnection studies are only required for the submission of *final* offers,
4 the advancement of projects' interconnection applications is considered throughout the
5 solicitation process. Entering the appropriate interconnection study process early and receiving
6 interconnection studies are important components of project viability and SCE will prioritize its
7 finite negotiation efforts on projects that are more viable.⁶² It is important to note that the time
8 required to complete interconnection studies varies. In some instances, the process can be
9 lengthy; accordingly, delaying submission of an interconnection application may prevent the
10 timely delivery of an interconnection study, particularly when the volume of applications is
11 expected to be high due to the LCR and Energy Storage solicitations.

12 SCE will host a bidders' conference to discuss the Energy Storage RFO process,
13 including the interconnection process, with participants. Information on how to attend the
14 conference will be made available on the Energy Storage RFO website. SCE also intends to hold
15 a separate public conference devoted specifically to the interconnection process; information
16 about this event will be posted on the Energy Storage RFO website.

17 **7. Draft 2014 Energy Storage RFO Documents**

18 SCE has attached three draft RFO documents in Appendix B:

19 Appendix B1 Draft 2014 Energy Storage RFO Instructions

20 Appendix B2 Local Capacity Resources *Pro Forma* Energy Storage
21 Agreement⁶³

22 Appendix B3 Local Capacity Resources *Pro Forma* Behind the Meter
23 Energy Storage Agreement⁶⁴

⁶² For more discussion on project viability, *see* Section III.A.1.d.1.

⁶³ SCE's "Local Capacity Resources *Pro Forma* Energy Storage Agreement," for transmission and distribution connected resources, is also referred to as the "2013 LCR Pro Forma Energy Storage Agreement."

1 With the exception of the Draft 2014 Energy Storage RFO Instructions, the RFO
2 documents are copies of the documents used for SCE's LCR RFO, which is currently underway.
3 As SCE learns more about contracting with storage projects throughout its ongoing negotiations
4 in the LCR RFO, SCE will adjust these RFO documents, which will then be finalized before the
5 2014 Energy Storage RFO launch.⁶⁵

6 **C. Bilateral Contracts**

7 The Commission has indicated that it prefers RFOs to bilateral contracts as a means to
8 procure energy storage systems.⁶⁶ SCE also prefers to use competitive solicitations over bilateral
9 contracts whenever possible; however, in certain instances, bilateral contracting may be
10 beneficial. Examples of such instances are discussed below.

11 **1. Contracts with Parties Precluded from RFO Participation**

12 Some contracts may not be able to come to SCE through an RFO. Federal
13 government agencies, for example, may not be able to participate in SCE's solicitations for a
14 variety of reasons including indemnification issues, terms of agreements, and governing law.
15 According to the Federal Acquisition Regulation, "agencies shall acquire utility services by a
16 bilateral written contract."⁶⁷ If agencies such as the Department of Defense seek storage
17 contracts, then bilateral contracts may be most appropriate. It is possible that projects that
18 cannot come through an RFO will present unique and beneficial opportunities for storage

Continued from the previous page

⁶⁴ SCE's "Local Capacity Resources *Pro Forma* Behind the Meter Energy Storage Agreement," for customer connected resources, is also referred to as the "2013 LCR RFO Pro Forma Demand Response Energy Storage Agreement."

⁶⁵ Additionally, SCE will remove LCR-specific requirements such as the limited geographic boundaries and the requirement to provide Resource Adequacy before publishing the final 2014 Energy Storage RFO documents.

⁶⁶ D.13-10-040, at 56.

⁶⁷ Federal Acquisition Regulation, Part 41.201(b).

1 projects. Accordingly, SCE maintains the flexibility to use bilateral contracts should these
2 unusual circumstances arise.

3 **2. Insufficient Market Response**

4 If SCE does not find enough economically viable qualified bids or if SCE
5 observes a need for market power mitigation,⁶⁸ SCE may consider signing bilateral contracts in
6 order to meet 2014 compliance requirements.

7 **D. Utility-Owned Storage**

8 The Storage Decision makes clear that the Commission encourages a mix of energy
9 storage ownership models, leading to a diverse portfolio and an environment that fosters
10 competition, innovation and affordability.⁶⁹ To help achieve these goals, the Storage Decision
11 allows SCE to count up to 290 MW of utility-owned storage.⁷⁰ For the 2014 procurement cycle,
12 the only utility-owned projects that SCE is proposing are the existing eligible projects described
13 in Section III. Because SCE sees much potential value in utility-owned storage projects, it will
14 continue to assess new potential projects which may be proposed for the 2016, 2018, or 2020
15 storage procurement cycles.

16 Utility ownership of storage is valuable because in some instances it may provide the best
17 value to ratepayers while at the same time promoting greater project diversification. Given
18 SCE's interest in developing a competitive energy market, SCE intends to focus its storage
19 ownership efforts in areas where the market may not provide the necessary product. SCE
20 describes these opportunities below.

21 **1. Expansion of Existing Utility-Owned Facilities**

22 In some circumstances, ratepayers could benefit from energy storage development
23 co-located with an existing IOU asset or from the expansion of an existing facility that would not

⁶⁸ See D.13-10-040, at 52.

⁶⁹ D.13-10-040, at 51.

⁷⁰ D.13-10-040, Appendix A, at 6.

lend itself to the power purchase agreement project structure. For a variety of reasons, it may be impractical to integrate third-party owned systems into existing utility facilities. These reasons include safety issues, reliability issues, operational concerns, contracting issues, and liability issues with utility-owned generation, distribution, or transmission facilities.

2. Distribution Reliability Functioning Storage

If SCE's demonstrations and pilots, described in Sections III.A and III.B, indicate that storage is an effective reliability asset, then SCE will likely pursue storage for distribution reliability purposes in future biennial storage procurement cycles. Given the stringent reliability asset requirements, discussed in Section II.D.2.b, SCE expects that all distribution reliability function storage will be utility-owned. If such projects are proposed, SCE would plan to acquire suitable technology and equipment using competitive processes, as allowed by the Storage Decision.⁷¹

3. Insufficient Market Response

If SCE does not find enough economically viable qualified bids in its Energy Storage RFOs or if SCE observes a need for market power mitigation,⁷² SCE will consider developing utility-owned storage in order to comply with its 2014 procurement target.

4. Market Transformative Projects

SCE supports the CPUC's goal of market transformation⁷³ and will support this goal by selecting projects across many of the end uses as defined in the Energy Storage OIR. If the market does not bring forward cost-competitive projects in certain end uses, and SCE believes it can develop those projects in a cost-competitive manner, SCE may consider ownership of such projects.

⁷¹ See D.13-10-040, at 87.

⁷² See D.13-10-040, at 52.

⁷³ See D.13-10-040, at 7.

1 **E. Customer Programs**

2 Because SCE has exceeded its 2014 customer-side storage targets, SCE does not
3 currently plan to propose any new customer programs in addition to its existing SGIP and PLS
4 programs. Still, as SCE moves into future biennial storage procurement cycles, SCE will
5 evaluate whether additional customer-side programs are the most effective means to achieve its
6 storage targets. Accordingly, SCE may propose customer programs for storage in the 2016,
7 2018, or 2020 procurement cycles.

1 V.

2 **STORAGE COST RECOVERY**

3 Depending on the ownership models and uses for different storage projects, SCE
4 proposes to recover storage costs through a variety of different mechanisms. SCE proposes
5 separate mechanisms for cost recovery of: (a) IE costs, (b) CPUC program evaluation costs, (c)
6 third-party owned market services and reliability storage costs, (d) utility-owned storage costs,
7 (e) customer-side storage program costs, and (f) departed customer costs.

8 **A. Recovery of Independent Evaluator Costs**

9 Pursuant to the Storage Decision, each IOU is to employ an IE to assess the
10 competitiveness and integrity of its energy storage solicitation and to prepare a post-solicitation
11 report.⁷⁴ SCE will submit the IE's report as part of its filing requesting approval of contracts
12 resulting from the solicitations. SCE requests to recover its IE costs associated with each energy
13 storage solicitation through its Energy Resource Recovery Account ("ERRA") balancing
14 account.

15 **B. Recovery of Program Evaluation Costs**

16 In addition, the Storage Decision directs the Commission's Energy Division to conduct a
17 comprehensive evaluation of the Energy Storage Procurement Framework and Design Program
18 by no later than 2016 (and every three years thereafter through 2022), and submit a report to the
19 Commission.⁷⁵ The IOUs are to collectively fund an annual budget of \$500,000 from all
20 customers, to be reimbursed to the Commission through the regular budget process, to allow
21 Commission staff to oversee evaluation and analysis of the program, and hire consultants for this
22 purpose.⁷⁶ The \$500,000 budget is to be shared by the IOUs according to their proportional

⁷⁴ D.13-10-040, Appendix A, at 10-11 ("The IE report shall include, at a minimum, an evaluation of the fairness of the IOUs solicitation and bid selection process, an assessment of project-specific negotiations, an analysis of the RFO bids, bid evaluation process (including valuation tools), an analysis of the overall market, and whether the contracts merit Commission approval").

⁷⁵ D.13-10-040, Appendix A, at 12.

⁷⁶ D.13-10-040, Appendix A, at 13.

1 share of peak load, and recovered from all customers starting in 2015.⁷⁷ SCE requests to recover
2 its share of the Energy Division program evaluation costs through the distribution sub-account of
3 the Base Revenue Requirement Balancing Account.

4 **C. Third-Party Owned Storage Cost Recovery**

5 **1. Third-Party Owned Storage for Energy Services**

6 Energy storage procurement targets may be met by energy storage systems owned
7 by a load-serving entity, publicly owned utility, customer-owned storage, third-party owned
8 storage, or joint ownership by two or more such entities. SCE proposes to record all third-party
9 owned storage-related costs in the ERRA balancing account, to be recovered in generation rates
10 from all bundled customers.

11 Pursuant to the Commission-adopted process for reviewing all costs recorded in
12 the ERRA, third-party owned energy storage procurement-related costs recorded in the ERRA
13 will be reviewed by the Commission in SCE's annual ERRA review applications.⁷⁸ This review
14 ensures that all entries to the account are stated correctly and are consistent with Commission
15 decisions.

16 Commission review procedures should be limited to ensuring that all recorded
17 costs are associated with energy storage procurement activities as defined and adopted by the
18 Commission in this proceeding.

19 **2. Third-Party Storage for Local Capacity Resources**

20 In addition, SCE is currently evaluating bids received in its LCR RFO. Resources
21 to be procured in this RFO were authorized by the Commission in D.13-02-015, which required
22 SCE to procure specific resource types to meet the authorized total of up to 1800 MW.⁷⁹ The

⁷⁷ D.13-10-040, Appendix A, at 13. The maximum budget available for evaluation is \$500,000 per year for 6 years, or \$3 million, unless modified.

⁷⁸ In addition, the IE and Program Evaluation costs would also be reviewed.

⁷⁹ D.13-02-015, at 130-131 (OP 1).

recently-issued Track 4 PD in the 2012 LTPP would authorize procurement of up to 700 MW more of certain resource types. In particular, the Track 4 PD would require SCE to procure 400 MW of new preferred resources, including energy storage, and would allow procurement of an additional 300 MW from all sources. This additional procurement would occur through the existing LCR RFO. SCE is still awaiting a final decision on its Track 4 request procurement authorization from all sources as part of the LCR RFO, as the Track 4 PD is not final and is subject to change. Recovery of costs incurred as a result of Track 1 and Track 4 will be consistent with the cost allocation mechanism (“CAM”) approved in D.06-07-029,⁸⁰ D.07-09-044,⁸¹ D.08-09-012⁸² and D.11-05-005,⁸³ and as allowed by D.13-02-015.

D. Utility-Owned Storage Cost Recovery

SCE will seek cost recovery of any proposed procurement of utility-owned energy storage systems, both reliability function storage and market-function storage, either through the biennial energy storage procurement applications as described in Appendix A of the Storage Decision or as authorized in other Commission proceedings, such as SCE’s GRC.⁸⁴

E. Customer-Side Programs Cost Recovery

Costs for SCE’s current customer-side incentive programs are recovered through program-specific balancing accounts. If SCE chooses to achieve its storage targets by implementing new customer-side incentive programs in the future, then SCE will likely propose cost recovery through program-specific balancing accounts at that time.

⁸⁰ D.06-07-029, Opinion on New Generation and Long-Term Contract Proposals and Cost Allocation, Jul. 20, 2006.

⁸¹ D.07-09-044, Opinion Adopting Joint Settlement Agreement, as Clarified, Regarding Principles for the Energy Auction Process and Products, Sept. 20, 2007.

⁸² D.08-09-012, Decision on Non-Bypassable Charges for New World Generation and Related Issues, Sept. 4, 2008.

⁸³ D.11-05-005, Decision Modifying New Generation and Long-Term Contract Cost Allocation Mechanism Pursuant to Senate Bill 695, May 5, 2011.

⁸⁴ SCE will request recovery for costs associated with transmission reliability storage in appropriate FERC-related filings.

1 **F. Cost Recovery for Departed Customers**

2 SCE currently recovers the above-market cost of its non-CAM procurement portfolio
3 through the Cost Responsibility Surcharge (“CRS”). A component of the CRS is the Power Cost
4 Indifference Adjustment (“PCIA”). The PCIA is used to keep the remaining bundled service
5 customers “indifferent” when bundled service customers leave and become Direct Access and
6 Community Choice Aggregation customers.⁸⁵ Like all other non-CAM resources, SCE proposes
7 to include the cost of both the third-party storage cost that is passed through to SCE and the
8 annual SCE-owned storage revenue requirement in its vintaged generation portfolio and resulting
9 vintaged PCIA charge. As such, departed customers will be responsible for paying their share of
10 the ongoing annual above-market cost of energy storage that SCE incurs during the years that
11 these customers were bundled service customers.

⁸⁵ The Commission has determined that as long as departed customers continue to pay their share of the above market costs of SCE’s generation portfolio that SCE incurs as a result of planning to provide generation to departed customers, then the remaining bundled service customers are indifferent to their departure.

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VI.

CONCLUSION

SCE's 2014 Energy Storage Procurement Plan is reasonable and complies with the requirements of the Storage Decision. As described in this Application, SCE has 23.68 MW of existing storage eligible to count towards SCE's 2014 storage targets. In addition, SCE asks the Commission to allow minimum LCR RFO storage of 50 MW to count towards SCE's 2014 targets, because the Commission should recognize SCE's early procurement of energy storage. SCE will procure the remainder of the 90 MW net of the existing storage and the LCR storage through its 2014 Energy Storage RFO. SCE does not have a preference for point-of-interconnection beyond meeting the Commission's minimum requirements.

In order to promote the CPUC's goal of storage market transformation, SCE will look to diversify its storage projects across different end-uses in order to gain important insights into the potential uses for storage. Additionally, as a means to maximize the benefits from energy storage, SCE will try to use storage to fill existing and future needs where those needs can be identified.

Lastly, the Commission should approve the recovery of the utilities' costs for an IE and for the CPUC's storage program costs. SCE looks forward to contributing towards the development of the energy storage market and to assist the Commission to better understand how to shape the storage industry in the future.

Appendix A

Table with Details on All Existing Eligible Storage Resources

Appendix A. - SCE's Existing Storage Projects

<i>Project name</i>	<i>Eligible biennial procurement cycle</i>	<i>Online date (expected or actual)</i>	<i>Project type</i>	<i>Point of interconnection</i>	<i>Capacity (MW)</i>	<i>Energy content (MWh)</i>	<i>Location (city)</i>	<i>Location (zip code)</i>	<i>Procurement proceeding</i>	<i>Procurement mechanism</i>	<i>Status of project</i>	<i>Expected operational life (years)</i>	<i>Primary application of project</i>	<i>Secondary application of project</i>	<i>Technology manufacturer</i>	<i>Project owner</i>	<i>Project operator</i>	<i>Operational requirements met (grid optimization, renewable integration, or GHG reduction)</i>
LESTA Station	2014	12/20/2011 (online)	Lithium-ion battery	Distribution	2.00	0.50	Westminster	92683	2012 General Rate Case (D.12-11-051)	Direct award	Operational	5+ years (device expected to be utilized for its useful life)	Load relief	Power quality	Lithium-ion/ A123	SCE	SCE	Grid optimization
Catalina Island Battery System	2014	6/7/2012 (online)	NaS battery	Distribution	1.00	7.20	Avalon	90704	2012 Catalina General Rate Case	RFI/RFP	Operational	15 - 20 years	Peak shaving	Back-up power	NGK Insulators, Ltd.	SCE	SCE	GHG reduction, grid optimization
Irvine Smart Grid -- Community Energy Storage ("CES")	2014	1/31/2013 (online)	Lithium-ion battery	Distribution	0.03	0.05	Irvine	92617	Various and DOE ARRA Funding	DOE project, RFP	Operational	2 year demonstration (device expected to be utilized for its useful life)	Load leveling	Ramp control	Lithium-ion/ S&C & Kokam	SCE	SCE	Grid optimization, renewable integration
Irvine Smart Grid -- Residential Home ES Unit ("RESU")	2014	10/31/2013 (online)	Lithium-ion battery	Customer	0.06	0.14	Irvine	92617	Various and DOE ARRA Funding	DOE project, RFP	Operational	2 year demonstration (devices expected to be utilized for its useful life)	Utility control for grid support	Back-up power	Lithium-ion/ LG	SCE	SCE	Grid optimization
Tehachapi Storage Project ("TSP")	2014	3/31/2014 (expected)	Lithium-ion battery	Distribution	8.00	32.00	Tehachapi	93651	Advice 2482-E/ Resolution E-4355 and DOE ARRA Funding	DOE project, RFP	Awaiting CAISO approval to energize	2 year demonstration (device expected to be utilized for its useful life)	Congestion relief, ramp rate control, market operations	Peak shaving, voltage regulation	Lithium-ion/ LG	SCE	SCE	Grid optimization, renewable integration
Discovery Science Center	2014	3/31/2014 (expected)	Metal halide battery	Customer	0.10	0.50	Santa Ana	92705	D.12-04-045	RFI/RFP	Purchase order issued	1 - 5 year pilot (device expected to be utilized for its useful life)	Peak demand reduction	Permanent load shift	Metal Halide/ GE&Princeton Power	SCE for first year, then customer	SCE	GHG reduction, grid optimization
Irvine Smart Grid -- Containerized Energy Storage	2014	Spring 2014 (expected)	Lithium-ion battery	Distribution	2.00	0.50	Irvine	92612	2012 General Rate Case (D.12-11-051) and DOE ARRA Funding	Direct award	Contract negotiation for installation	0.5 year demonstration (device expected to be utilized for its useful life)	Load relief	Ramp control	Lithium-ion/ A123	SCE	SCE	Grid optimization
Home Battery Pilot	2014	Q2 2014 (expected)	Lithium-ion battery	Customer	0.08	0.20	Various	Various	D. 12-04-045	RFI/RFP	Defining charter, deliverables, and resources	5-7 year pilot (device expected to be utilized for its useful life)	Peak shaving	Back-up power	Lithium-ion/ LG	SCE	SCE	Grid optimization
Vehicle to Grid Program at LA Air Force Base	2014	Q2 2014 (expected)	EV batteries	Distribution	0.65	TBD	El Segundo	90245	Advice Letter 2889-E	CPUC-approved Pilot Tariff	New resource implementation w/ CAISO	Up to 1.5 year pilot (Dept. of Defense can continue indefinitely)	Ancillary services	Peak shaving	Princeton Power, CTC	Various	Various	Grid optimization, renewable integration
Self-Generation Incentive Program ("SGIP")	2014	Between 1/1/2010 and 1/1/2016	Various	Customer	10.86	21.71	Various	Various	D.11-12-030	SGIP application	Various	10 years	Peak demand reduction	Back-up power	Various	Various	Various	Grid optimization, GHG reduction
Permanent Load Shift ("PLS") Program (installed prior to 2016; eligible towards 2014 targets)	2014	Between 1/1/2010 and 1/1/2016	Various	Customer	5.30	Information not collected from customers	Various	Various	D.12-04-045	PLS application	Various	20 years	Peak demand reduction	Permanent load shift	Various	Various	Various	Grid optimization, GHG reduction
Permanent Load Shift ("PLS") Program (installed after 12/31/2015; eligible towards 2016 targets)	2016	Between 1/1/2016 and 1/1/2017	Various	Customer	9.20	Information not collected from customers	Various	Various	D.12-04-045	PLS application	Various	20 years	Peak demand reduction	Permanent load shift	Various	Various	Various	Grid optimization, GHG reduction
Distribution Energy Storage Integration ("DESI") 1	2016	November 2014 (expected)	Lithium-ion battery	Distribution	2.00	2.00	TBD anywhere in SCE's territory	TBD	2012 General Rate Case (D.12-11-051)	RFI/RFP	Secured location; initiating system procurement phase	5+ years (device expected to be utilized for its useful life)	Distribution system support	TBD	TBD	SCE	SCE	Grid optimization, renewable integration
Distribution Energy Storage Integration ("DESI") 2	2016	February 2016 (expected)	Lithium-ion battery	Distribution	2.00	4.00	TBD anywhere in SCE's territory	TBD	2015 General Rate Case (A.13-11-003)	RFI/RFP	Initiating preliminary planning	5+ years (device expected to be utilized for its useful life)	Distribution system support	TBD	TBD	SCE	SCE	Grid optimization, renewable integration
Distributed Optimized Storage ("DOS") Project	2016	Year-end 2015 (expected)	Lithium-ion battery	Distribution	1.00	2.00	TBD anywhere in SCE's territory	TBD	EPIC (D.13-11-025)	RFI/RFP	Initiating preliminary planning	2 - 5+ years (device expected to be utilized for its useful life)	Distribution system support	TBD	TBD	SCE	SCE	Grid optimization, renewable integration
Distribution Energy Storage Integration ("DESI") 3	2018	2018 (expected)	Lithium-ion battery	Distribution	2.00	4.00	TBD anywhere in SCE's territory	TBD	2015 General Rate Case (A.13-11-003)	RFI/RFP	Completed project planning; initiating system study	5+ years (device expected to be utilized for its useful life)	Distribution system support	TBD	TBD	SCE	SCE	Grid optimization, renewable integration

Appendix B
RFO Documents

LIST OF ASSOCIATED RFO DOCUMENTS

B1.Draft 2014 Energy Storage RFO Instructions

B2.Local Capacity Resources *Pro Forma* Energy Storage Agreement

B3.Local Capacity Resources *Pro Forma* Behind the Meter Energy Storage Agreement

Note: Appendices B2 and B3 listed above are copies of SCE's 2013 LCR documents. As explained in Section IV.B.6 of the testimony, SCE will provide updated Energy Storage RFO documents after SCE concludes its LCR RFO and SCE better understands how to contract with storage resources.

Appendix B1

Draft 2014 Energy Storage RFO Instructions

Appendix B1

Draft 2014 Energy Storage RFO Instructions

**THESE DRAFT 2014 ENERGY STORAGE RFO INSTRUCTIONS
WILL BE INFORMED BY THE 2013 LCR RFO AND UPDATED
PRIOR TO LAUNCHING THE 2014 ENERGY STORAGE RFO**



SOUTHERN CALIFORNIA
EDISON[®]

An *EDISON INTERNATIONAL*[®] Company

2014 ENERGY STORAGE RFO

REQUEST FOR OFFERS

for

Energy Storage

RFO Participant Instructions

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ARTICLE ONE. GENERAL INFORMATION

1.01 Introduction

Southern California Edison (“SCE”) is issuing its 2014 Energy Storage RFO (the “RFO” or “Energy Storage RFO”) to solicit offers (“Offer” or “Offers”) from bidders (“Seller” or “Sellers”) to supply Product (as defined below) from energy storage resources (“ESR” or “ESR Facility” or “ESR Facilities”) with the ultimate objective of executing purchase agreements (“Agreement” or “Agreements”) substantially the same as SCE’s *Pro Forma* Energy Storage Agreement or *Pro Forma* Behind-the-Meter Energy Storage Agreement (the “*Pro Forma* Agreements”). These Energy Storage RFO Instructions (“RFO Instructions”) provide the following information on the Energy Storage RFO:

- (a) Describe the eligibility requirements for the Product for which SCE is soliciting;
- (b) Set forth the requirements of each Offer submission, including waivers, representations, warranties and covenants deemed made for all purposes as part of the Offer submission;
- (c) Describe the methods that SCE uses to evaluate each Offer;
- (d) Document the rights that SCE reserves for itself with regard to the Energy Storage RFO; and
- (e) Set forth a time frame for the Energy Storage RFO.

These RFO Instructions and all of its Associated Documents will be available on the RFO Website, which may be found here:

<http://on.sce.com/energystoragerfo> ¹

Capitalized terms used in the RFO Instructions, but not otherwise defined herein, have the meanings set forth in the *Pro Forma* Agreements.

1.02 Product Being Solicited

SCE is seeking to procure product and demand response resources from ESR Facilities (“Product”) meeting the CPUC definition of Energy Storage as adopted in D.13-10-040. If the ESR Facility is transmission or distribution connected (“in-front-of-the-meter”), the Product shall be as defined in the Final Agreement² and will include all energy storage capability of the ESR Facility throughout the Term of the Final Agreement; all revenues from Energy and Ancillary Services; all Capacity and

¹ All references to the RFO Website herein refer to this website location.

² Any Agreement executed by SCE and a Seller as a result of the Energy Storage RFO is a “Final Agreement.”

Ancillary Service Capacity, if any; and all Resource Adequacy Benefits, if any; generated by, associated with, or attributable to the output of the ESR Facility throughout the Term of the Final Agreement whether such credits or other attributes exist at the time a Final Agreement is executed or are created later during the Term of the Final Agreement. If the ESR Facility is connected on the customer side of the meter (“behind-the-meter”), the Product will be as defined in the Final Agreement, but likely to include reduction in energy usage whether through the right to call the ESR Facility or through a permanent shifting of energy usage from on-peak to off-peak periods, and all Resource Adequacy Benefits, if any.

1.03 Basic Terms and Conditions

- (a) For ESR Facilities that are transmission or distribution connected, Seller shall convey to SCE all electric energy stored in the ESR Facility as well as all attributes associated with such electric energy, including, but not limited to, Capacity, Ancillary Service Capacity, and Resource Adequacy Benefits that are attributable to the ESR Facility as detailed in the Energy Storage *Pro Forma* Agreement.
- (b) For ESR Facilities that are connected on the customer side of the meter, Seller shall convey to SCE the right to call the Product if callable, or the right to the permanent shifting of energy usage from on-peak to off-peak periods, and all Resource Adequacy Benefits, if any.
- (c) For ESR Facilities that are transmission and distribution connected, location can be within the CAISO-controlled area. ESR Facilities that are connected on the customer side of the meter must be located within SCE territory.
- (d) SCE will accept mutually-inclusive Offers (i.e., package deals or any similar requirement by Seller that an individual Offer may only be selected by SCE if other specific Offers are also selected). Seller must clearly identify all Offers with a mutual-inclusive limitation.
- (e) SCE will accept mutually-exclusive Offers (e.g., flat vs. escalating pricing for the same ESR Facility; 10-year vs. 15-year term for the same ESR Facility; etc.). Seller must clearly identify all Offers with a mutual-exclusivity limitation.
- (f) SCE encourages ESR Facilities in the vicinity of its Johanna and Santiago substations in Orange County, a target area for SCE’s Preferred Resources Pilot, to participate in the Energy Storage RFO. Pending the outcome of the Long Term Procurement Plan Track 4 Proceeding, SCE also encourages fully deliverable ESR Facilities in the greater Western LA Basin.

- (g) SCE encourages Women-Owned, Minority-Owned, and Service Disabled Veteran-Owned Business Enterprises (“WMDVBE”) to participate in the Energy Storage RFO. To be considered as a WMDVBE, Seller must provide a copy of a valid certificate from the Commission that verifies WMDVBE status of the firm and meet certain requirements. Information on SCE’s supplier diversity program can be found on the SCE website at this location:

www.sce.com/SD

- (h) SCE will only consider Offers that are substantially complete and include all of the applicable information, representations, warranties, and covenants as set forth in these RFO Instructions. SCE may allow an opportunity for all, but not less than all, Sellers with Offers that have been selected for the Short-List to refresh the pricing associated with that Short-Listed Offer upon successful completion of the negotiation of Seller’s storage agreement, and during the time period allotted in the Energy Storage RFO Schedule. Such refreshment may apply only to the pricing – none of the other parts of the Offers may be altered or changed after completion of the negotiation of Seller’s storage agreement.
- (i) SCE prefers Sellers that are special purpose entities organized for the sole purpose of owning and operating the project and which remain special purpose entities for the Term of the Final Agreement. Notwithstanding the foregoing, SCE will consider the ownership structure of each Seller on an individual basis, whether the Seller is organized as a special purpose entity or otherwise, and reserves the right in its sole discretion to (i) require any Seller to become a special purpose entity as a condition of executing a Final Agreement; and (ii) accept an Offer from any Seller who is not organized as a special purpose entity.
- (j) SCE affiliates are permitted to participate in this Energy Storage RFO. Seller must disclose whether or not it is an SCE affiliate

1.04 Qualification for Participation

- (a) SCE will consider Offers to purchase Product from ESR Facilities with forecasted initial delivery dates to SCE on January 1, 2017 or later. All resources must have a commercial operation date (“COD”) of December 31, 2024 or earlier in order to be eligible to participate in the Energy Storage RFO.
- (b) SCE will only consider Offers from Sellers for ESR Facilities in front of the meter if the ESR Facility is interconnected within the CAISO control area. Only ESR Facilities interconnecting within SCE’s distribution system will be eligible to receive distribution upgrade deferral value, if any, in the valuation.

SCE will only consider Offers for ESR Facilities that are interconnected on the customer side of the meter if the customer is an SCE customer.

- (c) SCE is only soliciting Product from ESR Facilities which, by the Final Offer deadline, possess: (1) a completed Phase I Interconnection Study or equivalent, or (2) a Fast Track response letter showing that the ESR Facility has passed WDAT Fast Track Process screens, or (3) a System Impact Study showing that the ESR Facility has passed Independent Study screens, or (4) a signed interconnection agreement, or (5) an equivalent or better interconnection study, agreement, process, or exemption. Full deliverability interconnection is not a requirement of this RFO. Further, the interconnection arrangements must support the ESR Facility's forecasted COD. Should Seller's interconnection arrangement indicate an interconnection date later than the ESR Facility's forecasted COD, the Offer will not be given further consideration.
- (d) Sellers may propose any contract term. If Seller offers a contract term of more than twenty (20) years, Seller must also provide an Offer with a twenty (20) year contract term.
- (e) Customer side of the meter projects with a Contract Capacity of 500 kW or greater, and distribution- and transmission-connected projects with a Contract Capacity of 1 MW or greater are eligible to participate in this Energy Storage RFO.
- (f) ESR Facilities with a continuous discharge duration of fifteen (15) minutes or more are eligible to participate in this Energy Storage RFO.
- (g) For projects that are transmission or distribution connected, Seller's Offer must demonstrate Site Control over the entire contract term by the submission of a Final Offer deadline or the Offer will not be given further consideration.
- (h) For Offers that are on the customer side of the meter, the Seller must either (1) identify the customer site where the ESR Facility will be located or (2) identify the types of customers (e.g., hotels, office buildings, etc.) where the ESR Facility will be deployed for Offers that are an aggregation of a number of sites.
- (i) Any new or existing ESR must have a COD of January 1, 2010 and meet the definition of Energy Storage as defined in D.13-10-040.
- (j) The ESR Facility must be based on commercialized technology (e.g., neither experimental, research, demonstration, nor development).

*** End of ARTICLE ONE ***

ARTICLE TWO. PROJECT LOCATION AND PRODUCT PRICE

2.01 ESR Facility Location and Interconnection

Seller's ESR Facility may be located either:

- (a) In the CAISO control area for facilities directly connected to the transmission or distribution system,
- (b) In SCE's service territory for facilities directly connected on the customer side of the meter.

2.02 Existing ESR Facilities

Sellers may submit Offers for an existing ESR facility that meets the CPUC definition of Energy Storage in D.13-10-040 and began operation January 1, 2010 or after.

Seller must demonstrate to SCE's reasonable satisfaction that Seller's existing energy storage agreement will terminate, by its own terms, without further action of the parties thereto, prior to the date on which deliveries from the existing ESR will commence under Seller's Offer.

2.03 Product Price

SCE intends to purchase the Product from those Sellers that have executed a Final Agreement at the Product Price, in \$/kW-month, as defined in the *Pro Forma* Agreement and further outlined below.

The Product Price submitted by Seller as part of its Offer must:

- (a) Conform with the Product Price requirements in the *Pro Forma* Agreement;
- (b) Assume posting Delivery Date Security and Performance Assurance in the amount required by, and further defined in, the *Pro Forma* Agreement;
- (c) If applicable, include awards, subsidies, tax credits, grants, etc.;
- (d) If applicable, assume the cost of any firm transmission rights to deliver the Product to the Delivery Point.

In addition, for any specific ESR Facility, Seller may submit an indexed pricing Offer so long as Seller also includes a fixed pricing Offer for that ESR Facility. SCE is not seeking any specific type of indexing structure. Seller may propose a price indexed to an Existing Zone Generation Trading Hub,³ commodities, equipment, cost of financing, etc. Seller may also consider placing price ceilings and floors on the indexed price.

*** End of ARTICLE TWO ***

³ As defined in the CAISO Tariff (formerly SP15, NP15, or ZP26)

ARTICLE THREE. ENERGY STORAGE RFO SCHEDULE AND OFFER SUBMITTAL PROCESS

3.01 RFO Schedule

Dates	Cumulative Days	Event
December 1, 2014	0	RFO Launch - SCE releases 2014 Energy Storage RFO documents.
December 17, 2014	16	SCE hosts Bidders' Conference.
February 2, 2015	63	Notice Of Intent deadline - Sellers to notify SCE of intent to submit Offers.
February 16, 2015 5:00 p.m. PPT	77	Offer deadline - Sellers to provide their full Offers to SCE.
April 1, 2015	121	Short-List Notification – Anticipated date SCE advises all Sellers on the status of their Offers relative to SCE's Short-List. For Sellers whose Offers have Short-Listed, the negotiation period begins.
August 14, 2015	256	Negotiation deadline - SCE and Short-Listed Sellers complete negotiations of the Final Agreements.
September 1, 2015	274	Final Offer deadline - For any Seller who completes negotiation of a Final Agreement refreshed pricing for the Product may be requested.
September 30, 2015	303	Final Selection - SCE makes final selections, notifies each Seller of its status relative to SCE's final selection and signs the Final Agreement.

December 30, 2015	394	Advice Letter or Application Filing - SCE submits the Final Agreements by way of Advice Letters or Applications (at the CPUC's discretion) to the CPUC for approval.
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3.02 RFO Process

SCE intends to conduct the RFO in two rounds: (1) SCE will short-list Offers and then negotiate with Sellers on the short-list; (2) SCE may require a price refresh after negotiations prior to final selection. {Price refresh requirements, if any, will be included in the revised RFO Instructions and posted by the time of the RFO launch.}

- (a) **RFO Launch**
SCE will launch its 2014 Energy Storage RFO by posting notification on the RFO Website and sending a notification email to its RFO participants list and the parties to the proceeding on SCE's Application for Approval of its 2014 Energy Storage Procurement Plan.
- (b) **Bidder's Conference**
SCE will host a bidders conference to discuss the Energy Storage RFO process with participants. A special focus on the process of interconnection will be included in this conference. Information on how to attend this conference will be made available on the RFO Website. {SCE also intends to host a separate conference devoted specifically to the interconnection process prior to the launch of the RFO.}
- (c) **Non-binding Notice of Intent to Offer**
Sellers should provide a non-binding Notice of Intent to Offer ("NOI") by the date and time identified in the applicable RFO Schedule in Section 3.01. {The form and instructions for submittal will be provided with the RFO launch documents.}
- (d) **Indicative Offer Submission**
SCE will only consider indicative Offers that are submitted as of the Indicative Offer deadline, contain all information requested in the Offer Form and contain each of the required items in the RFO Offer documents. These items include, but are not limited to, a confidentiality agreement, Seller financial information, a complete description of the proposed ESR project and any Offer options. {The Indicative Offer Form and required documents will be issued as part of the RFO launch documents.}
- (e) **Short-List**
Once indicative Offers are short-listed, negotiations can begin to finalize an ESA that is mutually agreeable to both parties. For Sellers that complete negotiations and reach Final Agreement, a price refresh may be requested at

SCE's sole discretion. The Short-List process is subject to minimum requirements and notification requirements as set forth in Article 5.

- (f) **Negotiation of Short-Listed Offers**
For a fixed period of time (as outlined in the Energy Storage RFO Schedule), SCE will negotiate with all Sellers whose Offers have been named to the Short-List.

Sellers that complete negotiations during that fixed period may have a one-time opportunity to refresh the Product Price in their Short-Listed Offer.⁴ Seller must submit the required interconnection documentation for the project by the end of the negotiation period for consideration in final selection.

- (g) **Final Selection**
If SCE chooses to require a price refresh, once refreshed prices are incorporated, SCE will make final selections and execute Final Agreements. SCE, in its sole discretion, reserves the right to execute Final Agreements with as many Sellers as SCE chooses including the right to not enter into any Final Agreements.

3.03 The *Pro Forma* Agreements⁵

- (a) SCE's *Pro Forma* Agreement for market-facing ESRs in-front-of-the-meter is structured under the assumption that:
 - (i) Seller's Offer is based upon the green-field development of a new ESR Facility,
 - (ii) The ESR Facility's first point of interconnection will be with the CAISO, and
 - (iii) SCE will be the Scheduling Coordinator.⁶
- (b) SCE's *Pro Forma* Agreement for customer-connected ESRs behind the meter is structured under the assumption that:
 - (i) Seller's Offer is based upon the ESR Facility serving all or a portion of SCE customers' electrical consumption,
 - (ii) The ESR Facility is connected to the existing distribution system, and

⁴ Sellers may only refresh their Product Price. No other changes will be accepted.

⁵ Attached as Associated Documents A and B.

⁶ SCE may serve as Scheduling Coordinator for any existing or proposed ESR Facility that is eligible to participate in this Energy Storage RFO. Seller must indicate in its Offer whether or not Seller wishes SCE to serve as the Scheduling Coordinator.

- (iii) SCE will provide dispatch instructions during the month for load shedding of the Seller's portfolio of accounts.

*** *End of ARTICLE THREE* ***

ARTICLE FOUR. ROLE OF INDPENDENT EVALUATOR

4.01 Independent Evaluator (“IE”)

D.08-11-008, Ordering Paragraph No. 2, requires an IE for all competitive solicitations that involve affiliate transactions, utility-owned or utility-turnkey offers, and for all solicitations that seek products two years or greater in duration, regardless of who participates. In addition, D.13-10-040 requires that SCE employ an IE to assess the competitiveness and integrity of its solicitation and to prepare a post-solicitation report.⁷

In compliance with these requirements, SCE has retained Sedway Consulting, Inc. (“Sedway”) as the IE for SCE’s 2014 Energy Storage RFO. Sedway is currently in SCE’s pre-qualified pool of IEs and has prior experience overseeing the negotiation and evaluation of Energy Storage in California. Sedway acted as the IE for the LCR RFO, where SCE solicited Energy Storage projects. SCE sought and obtained Energy Division approval to use Sedway as the IE for the Energy Storage RFO.

The IE will ensure that the solicitation process is fair to all qualified bidders, and also that no SCE affiliate has an undue advantage over non-affiliates in the solicitation. The IE will be required to make a determination as to whether SCE’s final selection was fair and free from anti-competitive behavior, and was not unfairly influenced by its affiliate relationships. The IE must report its findings to SCE’s Procurement Review Group (“PRG”) and the Energy Division, and may testify in CPUC proceedings, as required or requested by SCE or the CPUC. Upon completion of the bid process to a solicitation, the IE must also complete the CPUC’s Independent Evaluator Report Template, with updates based on completion of the solicitation itself, for review by the CPUC and SCE’s PRG.

The IE is expected to make recommendations to SCE for improvements to SCE’s solicitation process that the IE may have during the course of the solicitation activity. The IE, however, does not have the authority to mandate SCE to make any changes to its RFO process. SCE, not the IE, will conduct and administer the RFO solicitation and evaluation process. In addition, the IE may not negotiate with any bidder or counterparty on SCE’s behalf, serve as a single point of contact between SCE and bidders or counterparties, nor make binding decisions on behalf of SCE.

⁷ D.13-10-040, Appendix A, at 10.

ARTICLE FIVE. SHORT-LISTING

5.01 Minimum Requirements

Sellers are required to follow all of the instructions contained in these RFO Instructions and the Associated Documents and subsequent amendments or revisions in order to be eligible to compete in the solicitation process.

5.02 Notification of Selection for the SCE Short-List

- (a) If SCE notifies Seller that its Offer(s) has been selected for SCE's Short-List and Seller would like to continue in the solicitation process, Seller shall submit to SCE a redline to the applicable *Pro Forma* Agreement showing changes Seller wishes to negotiate with SCE. The *Pro Forma* Agreements are located on the RFO Website. *{SCE Note: Sellers are reminded that a finite amount of time is allotted for the negotiation of the Final Agreement as outlined in the Energy Storage RFO Schedule.}*
- (b) If Seller's Offer has been selected for SCE's Short-List and Seller does not wish to continue in the 2014 solicitation process, SCE requests that Seller withdraw its Offer from this Energy Storage RFO in writing within ten (10) Business Days after the Short-List notification from SCE.
- (c) If a Seller's Offer has not been selected for SCE's Short-List, SCE will notify Seller on the date that SCE notifies all Sellers selected for the Short-List of their selection.

*** End of ARTICLE FIVE ***

ARTICLE SIX. EVALUATION OF OFFERS

6.01 Proposal Evaluation Overview

SCE's Energy Storage RFO evaluation, like SCE's other RFO evaluations, involves four major steps: (a) developing price forecasts and scenarios, (b) determining the revenue streams of benefits and costs, (c) calculating present value and sum all revenue streams, and (d) considering qualitative factors. While the net present value ("NPV") is the quantitative factor that determines the relative costs and benefits of the offers, the final selection process also carefully considers the qualitative characteristics of the offers. SCE's process for valuation is discussed below.

- (a) **Step 1: Develop Price Forecasts and Scenarios**
SCE will prepare probabilistic forecasts for day-ahead energy prices and a single-point forecast for Resource Adequacy ("RA") prices, ancillary services ("AS") prices, and real-time energy prices over the time horizon necessary to evaluate the offers. A single-point forecast contains only the expected value of prices, which is appropriate for RA, AS, and real-time prices. However, SCE utilizes probabilistic forecasts for day-ahead energy because they can be used to build probability distributions of price outcomes (i.e. volatility and mean reversion parameters) that are used to calculate the extrinsic value of dispatchable resources.
- (b) **Step 2: Determine Revenue Streams**
The quantitative components included in determining the value of offers include both benefits and costs. The benefits include RA value, day-ahead and real-time energy market value, AS market value, and grid upgrade deferral value. The costs include fixed and variable contract payment costs, debt equivalence, and transmission and distribution upgrade costs, among others.
 - (i) **Resource Adequacy ("RA") Benefit**
Storage placed on the grid can have RA benefits provided the storage device meets the CPUC's and the CAISO's RA eligibility requirements and the device has been found fully deliverable by the CAISO. In-front-of-the-meter devices may qualify as eligible supply-side RA capacity, while behind-the-meter devices may provide demand-side RA benefit. This necessitates different mechanisms for determining the RA quantity for the two categories of devices. SCE will use the most current RA counting rules when ascribing qualifying RA capacity, including the CAISO rules for full capacity deliverability.
 - (ii) **Day-Ahead Energy, Real-Time Energy, and Ancillary Services Benefits**
Valuation of revenues from day-ahead energy, real-time ("RT") energy, and AS are interdependent and thus must be

both modeled and discussed collectively. Some storage projects may provide specific operating profiles, in which case SCE will simply use the specified operating profiles and the forecasted prices during the units' operation to calculate revenues. Still, many offers will allow SCE to dispatch the resources and determine the operating profile of the storage devices, which will then determine the devices' revenues from day-ahead energy, RT energy, and AS. These dispatchable offers require SCE to use a more complex optimization model to determine the best use of the device and associated maximization of revenues. The objective function of SCE's optimization model is to maximize the day-ahead, RT, and AS revenue over the duration of the contract while operating within the device's operational constraints. These constraints can include capacity, charge and discharge time, and unit degradation. The optimization model will yield the forecasted operating profile over the life of the contract and the associated forecast of day-ahead, RT, and AS revenues.

- (iii) **Grid Upgrade Deferral Benefit**
Energy storage resources may receive a benefit associated with incidental distribution upgrade deferral costs depending on how they are deployed. SCE may incorporate an estimate of savings into its valuation.
- (iv) **Contract Payment Cost**
Contract payment costs can vary from offer to offer, but they typically consist of a fixed payment stream, such as monthly capacity payments, as well as variable payment streams that depend upon the use of the device. Fixed payment streams are calculated directly according to contractual obligations. Variable payment streams, such as a variable operations and maintenance ("VOM") and charging costs, are modeled directly into the objective function of the optimization program used for valuation.
- (v) **Debt Equivalence Cost**
Debt equivalence is the term used by credit rating agencies to describe the fixed financial obligation resulting from long-term purchased power contracts. Pursuant to D.04-12-048, the Commission permits utilities to recognize costs associated with the effect debt equivalence has on the utilities' credit quality and cost of borrowing in their valuation process. Additionally, D.08-11-008 authorized the IOUs to continue recognizing the balance sheet impact of debt equivalence when valuing Power

Purchase Agreements (“PPAs”). Accordingly, SCE considers debt equivalence in its valuation process.

- (vi) **Transmission and Distribution Upgrade Costs**
Some projects do not have existing interconnections to the electric system. Others may have existing interconnections that are insufficient for a proposed expansion of existing facilities. For these projects, SCE includes the transmission and distribution system upgrade costs in its valuation.
reimbursable
- (vii) **Credit and Collateral Adder Cost**
Counterparties may seek to negotiate credit and collateral requirements that are different from SCE’s pro forma requirements. In doing so, there is no longer cost neutrality, or a “level playing field,” in terms of default exposure amounts across the offers. In these cases, SCE will calculate a cost to the offer based on the incremental exposure created by the negotiated terms.
- (viii) **Transmission Congestion and Losses**
SCE will consider the locational attributes of the resource that may impact its energy value. Locational attributes include marginal cost of congestion and marginal cost of losses.
- (ix) **Distribution Loss Factors**
SCE will consider distribution loss factors for projects connecting to the distribution system. These factors will be used to adjust the energy amounts of the resource, and are based on the project’s interconnection voltage.
- (x) **Market Participation Cost**
SCE will consider costs associated with participating in the CAISO markets. For example, in order to arbitrage the day-ahead and RT market, the storage device must overcome the difference between the day-ahead and RT Grid Management Charge (“GMC”) cost.⁸
- (xi) **GHG Compliance Cost**
SCE will consider introducing a GHG compliance cost for those devices that directly generate GHG emissions if needed. For example, a storage device that compresses natural gas may have GHG compliance costs for methane that leaks out of the unit.

⁸ For more information on the Grid Management Charge see the CAISO website, *available at* <http://www.caiso.com/informed/Pages/StakeholderProcesses/Budget-GridManagementCharge.aspx>.

- (xii) Other Benefits and Costs
If SCE can reasonably calculate estimates of other costs and/or benefits that are directly attributable to an offer, then these estimates will be included in the quantitative valuation, and ultimately, in the offer's NPV.
- (c) Step 3: Present Value and Sum All Revenue Streams
All benefit and cost streams are netted and discounted by an annual discount factor to yield a single NPV. SCE uses a standard 10% discount rate for its NPV calculations.
- (d) Step 4: Consider Qualitative Factors
In addition to the benefits and costs quantified during the valuation process, SCE assesses non-quantifiable characteristics of the offers. SCE will consider qualitative characteristics such as project viability and project diversity leading to market transformation in determining its final selection of offers.

*** End of ARTICLE SIX ***

ARTICLE SEVEN. REGULATORY APPROVAL

7.01 CPUC and FERC Approvals

The Delivery Period under the *Pro Forma* Agreements may not commence until CPUC Approval or Final CPUC Approval, as applicable, of the Final Agreement has been obtained.

In the event a transaction occurs between SCE and any of its Affiliates, such Final Agreement may also require FERC approval. In such case, the Delivery Period under the relevant Final Agreement may not commence until approval by both the CPUC and FERC is obtained.

7.02 Support for Regulatory Purposes

SCE may request that Seller provide updates of any information requested in this Energy Storage RFO for purposes of filing applications or advice letters with the CPUC and, if applicable, FERC for approval of any Final Agreement.

*** *End of ARTICLE SEVEN* ***

ARTICLE EIGHT. CONFIDENTIALITY, CONDUCT, AND SAFETY

8.01 Confidentiality

Sellers are required to enter into a Confidentiality Agreement with SCE when indicative Offers are submitted in the form set forth in the RFO launch documents.
{Form Confidentiality Agreement to be included in RFO launch documentation.}

8.02 Conduct

It is expected that the Parties will act in good faith in their dealings with each other with respect to this Energy Storage RFO.

8.03 Safety

Seller must develop a written plan for the safe construction and operation of the ESR Facility as set forth in the *Pro Forma* Agreement.

*** *End of ARTICLE EIGHT* ***

ARTICLE NINE. WAIVERS AND RESERVATION OF RIGHTS

9.01 Termination of Energy Storage RFO

SCE reserves the right at any time to modify any dates specified in this Energy Storage RFO or abandon this Energy Storage RFO without notice, without assigning any reasons, and without liability of Edison International, SCE or any of their subsidiaries, affiliates or representatives to any Seller.

SCE will not be deemed to have accepted any Offer, and will not be bound by any term thereof, unless and until authorized representatives of SCE and Seller execute a Final Agreement and, if appropriate, related collateral and other required agreements.

In the event that SCE terminates this Energy Storage RFO, Seller shall be responsible for any expenses incurred by Seller as a result of this Energy Storage RFO.

9.02 Release of SCE for any Delays

Seller acknowledges that except for SCE's obligation to submit a fully executed Final Agreement to the CPUC for approval, Seller bears sole responsibility for submitting all applications and obtaining all permits, leases or mortgages, and interconnection, financing and other agreements necessary for Seller to perform under a Final Agreement.

Seller further acknowledges and agrees that SCE shall have no liability for the:

- (a) Time required to complete any studies, obtain any required permits for ESR Facility operation, or enter into any agreements discussed or contemplated under this Energy Storage RFO (including without limitation interconnection studies, leases, mortgages, financing or permits);
- (b) Time required to perform construction for network upgrades necessary to meet the expected Initial Delivery Date or the Initial Delivery Date deadline in the Final Agreement;
- (c) Time to construct the ESR Facility;
- (d) Time required to acquire any environmental permits to construct or operate, including acquisition of any emission credits required by law or regulation; or

9.03 Waived Claims

By submitting an Offer, Seller knowingly, voluntarily, and completely waives any rights under statute, regulation, state or federal constitution or common law to assert any claim, complaint or other challenge in any regulatory, judicial or other forum, including without limitation, the CPUC (except as expressly provided below), the FERC, the Superior Court of the State of California ("State Court") or any United

States District Court (“Federal Court”) concerning or related in any way to the Energy Storage RFO or these RFO Instructions, including all exhibits, attachments, and appendices thereto (“Waived Claims”). Seller further expressly acknowledges and consents that if it asserts any Waived Claim at the CPUC, FERC, State Court or Federal Court, or otherwise in any forum, to the extent that Seller’s Offer has not already been disqualified, SCE is entitled to automatically disqualify this Offer from further consideration in the Energy Storage RFO or otherwise, and further, SCE may elect to terminate the Energy Storage RFO.

By submitting an Offer, Seller further agrees that the sole forum in which Seller may assert any challenge with respect to the conduct or results of the Energy Storage RFO is at the CPUC. Seller further agrees that: (1) the sole means of challenging the conduct or results of the Energy Storage RFO is a complaint filed under Article 3, Complaints and Commission Investigations, of Title 20, Public Utilities and Energy, of the California Code of Regulations, (2) the sole basis for any such protest shall be that SCE allegedly failed in a material respect to conduct the Energy Storage RFO in accordance with these RFO Instructions; and (3) the exclusive remedy available to Seller in the case of such a protest shall be an order of the CPUC that SCE again conduct any portion of the Energy Storage RFO that the CPUC determines was not previously conducted in accordance with these RFO Instructions (including any Associated Documents). Seller expressly waives any and all other remedies, including, without limitation, compensatory and/or exemplary damages, restitution, injunctive relief, interest, costs and/or attorneys’ fees. Unless SCE elects to do otherwise in its sole discretion, during the pendency of such a protest the Energy Storage RFO and any related regulatory proceedings related to the Energy Storage RFO will continue as if the protest had not been filed, unless the CPUC issues an order suspending the Energy Storage RFO or SCE has elected to terminate the Energy Storage RFO.

Seller further acknowledges and agrees that if Seller asserts any Waived Claim, SCE shall be entitled to seek immediate dismissal of Seller’s claim, complaint or other challenge, with prejudice, by filing a motion to dismiss (or similar procedural device) supported by the language in this Article Nine and that Seller will not challenge or oppose such a request for dismissal. Seller further acknowledges and agrees that if it asserts any Waived Claim, and if SCE successfully has that claim dismissed or transferred to the CPUC, Seller shall pay SCE’s full costs and expenses incurred in seeking such dismissal or transfer, including reasonable attorneys’ fees.

Seller agrees to indemnify, defend and hold harmless SCE from any and all claims by any other Seller asserted in response to the assertion of any Waived Claim by Seller or as a result of a Seller’s protest to a filing at the CPUC resulting from the Energy Storage RFO.

Except as expressly provided in these RFO Instructions, nothing in the RFO Instructions, including Seller's waiver of any Waived Claims as set forth above, shall in any way limit or otherwise affect the rights and remedies of SCE.

*** *End of ARTICLE NINE* ***

ARTICLE TEN. COMMUNICATIONS

10.01 For purposes of this Energy Storage RFO, “Communications” means the exchange of any material information by electronic, written, oral or other means other than as expressly provided for herein.

All Communications concerning this Energy Storage RFO, including Communications concerning the preparation of Offers or other submissions to SCE related to the Energy Storage RFO, should be submitted to SCE pursuant to instructions on the RFO Website.

SCE may, in its sole discretion, decline to respond to any correspondence or other inquiry without liability or responsibility.

**** End of ARTICLE TEN ****

ARTICLE ELEVEN. SCE RIGHTS AND DOCUMENT CONFLICTS

11.01 SCE's Rights

SCE may, at its sole discretion, enter into Final Agreements with one or more entities submitting Offers that will provide the best value to SCE's customers considering a variety of factors as discussed below.

SCE reserves the right to reject any Offer at any time on the grounds that it does not conform to the terms and conditions of these RFO Instructions.

SCE also retains the right, in its sole judgment, to:

- (a) Modify these RFO Instructions, and any of the Associated Documents, as it deems necessary;
- (b) Condition SCE's acceptance of any selected Offer on a Seller's agreement to modifications thereto including any modifications that may be recommended by SCE's Procurement Review Group as initially established in D.02-08-071 of the Commission; and
- (c) Determine what is or is not "reasonable," as this term is used within these RFO Instructions.

11.02 Document Conflicts

In the event of any conflict between terms contained in these RFO Instructions or any of the Associated Documents, including, without limitation, the *Pro Forma* Agreements or the Offer Form, the conflict will be resolved by the following priority of documents:

- (a) The *Pro Forma* Agreement;
- (b) These RFO Instructions;
- (c) Other Associated Documents to these RFO Instructions; and
- (d) The Offer Form.

Notwithstanding the foregoing, if a Final Agreement is executed between SCE and Seller, it will have precedence over the documents listed above.

*** End of ARTICLE ELEVEN ***

Appendix B2

Local Capacity Resources *Pro Forma* Energy Storage Agreement



SOUTHERN CALIFORNIA
EDISON

An *EDISON INTERNATIONAL* Company

**2013 LCR PRO FORMA
ENERGY STORAGE AGREEMENT**

between

SOUTHERN CALIFORNIA EDISON COMPANY

and

[SELLER]

[Date]

Energy Storage Agreement

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ENERGY STORAGE AGREEMENT

Between

SOUTHERN CALIFORNIA EDISON COMPANY

And

[SELLER]

This Energy Storage Agreement, together with the Appendices (collectively, the “Agreement”) is made and entered into as of this [] day of [Month], [Year] (“Effective Date”) by **SOUTHERN CALIFORNIA EDISON COMPANY**, a California corporation (“SCE” or “Buyer”), and **[SELLER]**, a [Seller’s business registration] (“[Seller’s Shortname]” or “Seller”). SCE and Seller are sometimes referred to herein individually as a “Party” and jointly as the “Parties”. All capitalized terms used in this Agreement are used with the meanings ascribed to them in Appendix A to this Agreement.

RECITALS

This Agreement is made with reference to the following facts, among others:

- A. SCE is an investor-owned electric utility serving customers in central and southern California.
- B. Seller is proposing to construct and own the Project located in [insert description of location], and considered to be within the area described as the [Western Los Angeles Basin or Moorpark Sub-Area] in CPUC Decision 13-02-015 as a [Western LA Basin Project or Moorpark Sub-Area Project].
- C. Seller wishes to sell and deliver exclusively to SCE, and SCE wishes to purchase, the Product under the conditions set forth in this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of these recitals and the agreements contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, agree as follows.

ARTICLE ONE.

PURCHASE AND SALE OF PRODUCT

1.01. Purchase and Sale of Product.

During the Delivery Period, Seller shall deliver and sell, and SCE shall receive and purchase, the Product, subject to the terms and conditions of this Agreement, including the Operating Restrictions set forth in Appendix 1.01. Moreover, during the Delivery Period Seller shall not substitute or purchase any Capacity, Energy, Ancillary Services, Ancillary Service Capacity or Resource Adequacy Benefits from any other generating resource, non-generator resource, or storage device or from the market for delivery hereunder.

- (a) Capacity. During the Delivery Period, SCE shall have the exclusive right to the Capacity from the Project. As of the Effective Date, the Contract Capacity shall equal the aggregate of the Expected Contract Capacity for each Storage Unit as set forth in Appendix 1.01.

Pursuant to Article 7 and Appendix 7, Contract Capacity shall be adjusted upon SCE's acceptance of the Initial Commercial Operation Test, in accordance with Part II.L. of Appendix 7. Appendix 1.01 shall be automatically amended to reflect the updated Contract Capacity achieved by the Storage Unit(s) pursuant to such Test; *provided*, that in no event may the Contract Capacity, as determined pursuant to Article Seven, exceed the aggregate Expected Contract Capacity of the Storage Unit(s).

- (b) Energy. During the Delivery Period, except for Energy resulting from a Non-SCE Dispatch, Seller dedicates the Energy of the Project to SCE, and SCE shall have the exclusive rights to all Energy stored by the Project, including pursuant to a forward schedule or an Imbalance Energy instruction from the CAISO.
- (c) Ancillary Services. During the Delivery Period, SCE shall have the exclusive rights to all Ancillary Services Capacity and Associated Ancillary Services Energy from the Project, subject only to the limitations set forth in Appendix 1.01.
- (d) Resource Adequacy Benefits. During the Delivery Period, Seller grants, pledges, assigns and otherwise commits to SCE the full Capacity of the Project in order for SCE to meet its RA Compliance Obligations under any

Resource Adequacy Rulings. Seller represents, warrants and covenants to SCE that Seller (i) has not used, granted, pledged, assigned or otherwise committed, and (ii) will not use, grant, pledge, assign or otherwise commit any Capacity of any Storage Unit to meet the RA Compliance Obligations of, or confer Resource Adequacy Benefits upon, any entity other than SCE during the Delivery Period, except to the extent such benefits are conferred on another entity pursuant to an order of the CPUC or at the direction of SCE. Notwithstanding anything to the contrary in this Agreement, the Parties shall take all actions that may be necessary to effect the use of the Resource Adequacy Benefits of the Project in accordance with the preceding sentence throughout the Delivery Period; *provided, however*, that no such action shall require Seller to modify the Project or to operate the Project in a manner that is inconsistent with the Operating Restrictions. Such actions may include: (i) amending this Agreement and complying with all current and future Tariff provisions and decisions of the CPUC and/or any other Governmental Authority that address Resource Adequacy performance obligations and penalties; (ii) ensuring that the Project's Capacity is certified by the CAISO as being fully deliverable as of the Initial Delivery Date for the purposes of counting all of the Contract Capacity towards SCE's RA Compliance Obligations; and (iii) executing all documents or instruments; but excluding, in each case, any action which is inconsistent with any Applicable Law or any permit applicable to the Project.

- (e) Ownership. Seller shall maintain ownership of and demonstrable exclusive rights to the Project throughout the Term.
- (f) Exclusive Rights. During the Delivery Period and except only as a result of a Non-SCE Dispatch, SCE shall have exclusive rights to the Product and all benefits derived therefrom, including the exclusive right to use, market or sell the Product and the right to all revenues generated from the use, sale or marketing of the Product.

1.02. Storage Units.

- (a) CAISO Test Results. Seller shall provide all CAISO Certification test results for each Storage Unit within three (3) Business Days of Seller's receipt for any initial or subsequent test throughout the Term.
- (b) Delivery of Energy. Energy from each Storage Unit shall be delivered to the Energy Delivery Point.
- (c) Station Use. The Storage Unit(s) will not serve Station Use and Seller shall separately procure and meter Station Use with the Station Use Metering Equipment. The Storage Unit(s) is/are expected to use *[number*

#] MWh per year for Station Use. [SCE note: insert description of Station Use]

- (d) Storage Unit(s)' Test Parameters. For purposes of the Initial Commercial Operation Test and any Contract Capacity & Ancillary Services Tests, the following test parameters ("Test Parameters") shall apply:

[SCE Comment: TBD based on storage technology]

- (e) Location of Site. *[Project Address]*, as further described in Appendix 1.02.

1.03. Delivery Points.

- (a) Energy Delivery Point. The Energy Delivery Point shall be the *[description]*, as specified in Appendix 1.03(a).
- (b) Point of Interconnection. The Point of Interconnection is *[insert substation name and location]*, as specified in Appendix 1.03(a).
- (c) Interconnection Queue Position. *[Number(s) to be inserted]*

ARTICLE TWO.

**TERM; CONDITIONS PRECEDENT AND
DELIVERY PERIOD**

2.01. Term.

The "Term" of this Agreement shall commence upon the Effective Date, and shall continue until the expiration of the Delivery Period.

2.02. Approval Date; Termination Related to Failure to Timely Obtain Regulatory Approval.

The "Approval Date" is the date that all the following conditions are satisfied:

- (a) Final CPUC Approval. Final CPUC Approval shall have been obtained. SCE shall seek Final CPUC Approval expeditiously and in good faith. As requested by SCE, Seller shall use commercially reasonable efforts to support SCE in obtaining Final CPUC Approval. SCE has no obligation to seek rehearing or to appeal a CPUC decision which fails to approve this Agreement or which contains findings required for Final CPUC Approval with conditions or modifications unacceptable to SCE.

- (b) Delivery of Documents. Seller shall have delivered to SCE all documents and information required under this Agreement to be delivered prior to the Approval Date.

Either Party has the right to terminate this Agreement on Notice, which will be effective five (5) Business Days after such Notice is given, if Final CPUC Approval has not been obtained or waived by SCE in its sole discretion within three hundred sixty-five (365) days after SCE files its request for Final CPUC Approval and a Notice of termination is given on or before the three hundred ninety-fifth (395th) day after SCE files the request for Final CPUC Approval.

If either Party exercises its termination right pursuant to this Section 2.02, no Termination Payment will be due or owing by either Party and Seller will be entitled to a return of any Delivery Date Security provided to SCE.

2.03. Expected Initial Delivery Date.

Subject to adjustment made under Section 2.05(b), the Expected Initial Delivery Date for the Project is *[Date]*.

2.04. Delivery Period.

The “Delivery Period” shall commence at 12:01 a.m. on the date that the Project achieves its Initial Delivery Date, and shall continue until the earlier of: (i) midnight on the date that is *[number of years]* years after the Expected Initial Delivery Date, (ii) an Early Termination Date designated in accordance with Section 3.03, or (iii) the date this Agreement is otherwise terminated in accordance with its terms.

The “Initial Delivery Date” shall be the first day of the first full month after all of the following conditions have been satisfied for the Project:

- (a) Seller has completed, to SCE’s satisfaction, Seller’s obligations set forth in Sections 5.01(a) through 5.01(h), inclusive, in order to bring the Project into full operation as contemplated by this Agreement;
- (b) Each Storage Unit has achieved Commercial Operation;
- (c) Seller has received its Market-Based Rate Authority to sell the Product to SCE under the terms of this Agreement and has received all other approvals and authorizations required for Seller to perform its obligations under this Agreement;
- (d) Seller has executed a Participating Generator Agreement and/or Participating Load Agreement, as applicable, Meter Service Agreement For CAISO Metered Entities, and any other forms or agreements required

by the CAISO with respect to the Project, and delivered true and complete copies of all such forms and agreements to SCE;

- (e) Seller has taken all actions and executed all documents and instruments, required to authorize SCE to act as Scheduling Coordinator under this Agreement, and SCE is authorized to act as Scheduling Coordinator;
- (f) Seller has entered into and complied in all material respects with all obligations under all interconnection agreements required to enable parallel operation of the Project with the PTO's electric system and CAISO Grid;
- (g) Seller has deposited with SCE the applicable Performance Assurance amounts as set forth in Section 13.02(c);
- (h) Seller has executed and delivered to SCE all documents or instruments required under or requested pursuant to Article Thirteen;
- (i) Seller has provided SCE with certification from an independent, non-Affiliate California registered professional mechanical engineer, that (i) Seller has designed and built the Project to have a *[SCE Comment: number of years based on technology]* year design life in accordance with Prudent Electrical Practices, and (ii) the design and construction of the Project was carried out by the original equipment manufacturer or other competent organization;
- (j) Seller has delivered to SCE all insurance documents required under Section 30.15;
- (k) Seller has obtained CAISO Certification for each Storage Unit;
- (l) Seller has taken all actions necessary to ensure that the Project is fully deliverable in an amount equal to the Contract Capacity, as determined by the CAISO, for RA Compliance Obligations, and Seller has delivered to SCE a certification or other documentation from the CAISO that evidences that the Project is fully deliverable for the purposes of counting all of the Contract Capacity towards SCE's RA Compliance Obligations; and
- (m) SCE shall have obtained or waived Final CPUC Approval.

The Parties agree that, in order for Seller to obtain an Initial Delivery Date, the Parties may have to perform certain of their Delivery Period obligations in advance of that Initial Delivery Date, including Seller delivering an Availability Notice for the Initial Delivery Date, and SCE delivering a Dispatch Notice and scheduling the Project's energy requirements for the Initial Delivery Date. The

Parties shall cooperate with each other in order for SCE to be able to dispatch the Project for the Initial Delivery Date.

Notwithstanding any other provision in this Agreement, the Initial Delivery Date may not occur prior to the Expected Initial Delivery Date, and the Initial Delivery Date may not occur later than *[Insert date that is three hundred sixty-five (365) days after the Expected Initial Delivery Date]*.

2.05. Delayed Initial Delivery Date.

- (a) Daily Delay Damages. If Seller has not satisfied the conditions set forth in Section 2.04 for the Initial Delivery Date of the Project by the Expected Initial Delivery Date, Seller shall owe and pay to SCE the Daily Delay Damages for each day of delay beyond the Expected Initial Delivery Date up to the number of remaining days until *[Insert date that is three hundred sixty-five (365) days after the Expected Initial Delivery Date]*. SCE shall be entitled to recover the Daily Delay Damages owed by Seller by drawing on and/or retaining any Delivery Date Security.
- (b) Delays Due to Force Majeure. Subject to Section 3.02(f) and Seller's compliance with its obligations as the Claiming Party under Section 23.02, if Seller has not satisfied the conditions set forth in Section 2.04 for the Initial Delivery Date of the Project by the Expected Initial Delivery Date due to Force Majeure, then the Expected Initial Delivery Date will be extended on a day-for-day basis for the duration of the Force Majeure.

2.06. No Liability of SCE.

SCE shall have no liability to Seller, regardless of cause (including any act or omission of SCE, including as buyer under this Agreement or as a PTO) for (a) any delay or failure by Seller to achieve the Initial Delivery Date by the Expected Initial Delivery Date, (b) any costs or damages incurred by Seller as a result thereof or any reduction in Seller's Monthly Capacity Payments resulting from any delay in achieving the Initial Delivery Date by the Expected Initial Delivery Date, or (c) a reduction in the Term or the Delivery Period.

2.07. Seller's Queue Position.

Seller must not withdraw the Interconnection Queue Position identified in Section 1.03(c) or assign or transfer that Interconnection Queue Position to any entity or for the benefit of any other agreement other than this Agreement without SCE's prior written consent.

ARTICLE THREE.

EVENTS OF DEFAULT; REMEDIES; TERMINATION

3.01. Events of Default.

An “Event of Default” shall mean, with respect to either Party (a “Defaulting Party”), the occurrence of any of the following:

- (a) The failure to make, when due, any payment required to be made to the other Party pursuant to this Agreement, if such failure is not remedied within three (3) Business Days after written Notice of such failure is given by the Non-Defaulting Party;
- (b) Any representation or warranty made by such Party herein is false or misleading in any material respect when made or when deemed made or repeated if the representation or warranty is continuing in nature;
- (c) The failure to perform any material covenant or obligation set forth in this Agreement (except to the extent constituting a separate Event of Default and except for any failure to obtain all Required Permits on or before the Required Permit Date), if such failure is not remedied within five (5) Business Days of receipt of Notice; or
- (d) Such Party becomes Bankrupt.

3.02. Seller Events of Default.

An “Event of Default” shall mean, with respect to Seller (as the “Defaulting Party”), the occurrence of any of the following:

- (a) Seller fails to comply with any of its affirmative covenants under Section 24.03 or its negative covenants under Section 24.04, unless such failure to comply is cured within a period specifically provided elsewhere in this Agreement applicable to such failure to comply;
- (b) Seller consolidates or amalgamates with, or merges with or into, or transfers all or substantially all its assets to, another entity without SCE’s written consent, which consent may be granted or withheld in SCE’s sole discretion;
- (c) Seller fails to comply with its obligations under Article Thirteen, including failing to post or maintain the Delivery Date Security or applicable Performance Assurance, within three (3) Business Days after SCE provides Notice of the failure;
- (d) Seller makes any material misrepresentation or omission in any report, including status and metering report, or the Milestone Schedule or any

Availability Notice (including the log, records and reports required under Sections 8.01(b), 8.01(c), 8.01(d), 20.01 and 22.01, Appendix 6.01(A), Appendix 6.01(B) and Appendix 20.01) required to be made or furnished by Seller pursuant to this Agreement;

- (e) Seller sells, assigns, or otherwise transfers, or commits to sell, assign, or otherwise transfer, the Product, or any portion thereof, to any party other than SCE or the CAISO during the Delivery Period;
- (f) Seller fails to achieve the Initial Delivery Date for the Project by *[Date that is three hundred sixty-five days after the Expected Initial Delivery Date]*, whether due to Force Majeure or otherwise;
- (g) Seller starts-up, operates, charges, or discharges or permits or causes any third party to start-up, operate, charge or discharge any Storage Unit other than as specifically permitted under Article Seven, Article Sixteen, or Article Eighteen;
- (h) A termination of, or cessation of service under, any agreement necessary for Seller to (i) interconnect the Project to the PTO's electric system, (ii) charge or discharge the electric energy on or from the PTO's electric system, (iii) comply with the CAISO Tariff; *provided*, if termination of, or cessation of service under, any such agreement is not due to the fault of Seller, Seller shall have ten (10) days from such termination or cessation to cure such default;
- (i) The stock, equity ownership interest in Seller or assets of Seller is directly or indirectly pledged or assigned, or caused or permitted to be pledged or assigned, as collateral to any party other than to Lender without SCE's prior written consent, which consent may be granted or withheld in SCE's reasonable discretion;
- (j) Seller fails to maintain its PGA, PLA or MSA during the Delivery Period and such failure is not cured within ten (10) days of termination of the PGA, PLA or MSA, as applicable; *provided*, the Storage Unit shall be deemed not available for purposes of Section 10.01 from the first day of the failure until such PGA, PLA or MSA is fully reinstated or replaced;
- (k) By the Required Permit Date, Seller fails to obtain all of the Required Permits, or all applicable appeal periods for such approvals or permits have not expired;
- (l) Except as permitted under Article Fourteen, Seller does not own or otherwise have control of the Project;
- (m) Seller fails to comply with its obligations under Section 8.02(a) with respect to the Prevention Equipment;

- (n) Seller fails to comply with any of its obligations under Sections 8.02(b), 8.02(c) or 8.02(f);
- (o) Seller fails to comply with any of its obligations under Sections 8.02(d);
- (p) Seller fails to comply with its obligations under Section 16.02;
- (q) Subject to the terms of a Collateral Assignment Agreement, the occurrence and continuation of a default, event of default or other similar condition or event under one or more agreements or instruments relating to indebtedness for borrowed money, which results in the indebtedness becoming, or becoming capable at such time of being declared, immediately due and payable;
- (r) Seller intentionally or knowingly delivers, or attempts to deliver, at the Energy Delivery Point electric energy that was not stored by the Project;
- (s) Seller fails to take any actions necessary to dedicate, convey or effectuate the use of any and all Resource Adequacy Benefits for SCE's sole benefit as specified under Section 1.01(d);
- (t) Seller violates SCE's Storage Unit Removal Right by marketing, dispatching, charging, storing or conveying Product from the applicable Storage Unit(s) to SCE or any other party; ; or
- (u) Seller removes from the Site equipment upon which the Contract Capacity or Capacity of the Storage Unit(s) has been based, except for the purposes of replacement, refurbishment, repair or maintenance, and the equipment is not returned within five (5) Business Days after Notice from SCE.

3.03. Early Termination Date.

If an Event of Default with respect to a Defaulting Party shall have occurred and be continuing, the other Party (the "Non-Defaulting Party") shall have the right, by delivery of Notice to the Defaulting Party, to (a) designate a day, no earlier than the day such Notice is effective and no later than twenty (20) days after such Notice is effective, as an "Early Termination Date," and to terminate this Agreement in whole or in part, as provided herein, as of such Early Termination Date, (b) accelerate all amounts owing between the Parties under this Agreement which shall be due and payable as of such Early Termination Date, (c) withhold or set-off any payments due to the Defaulting Party under this Agreement, and (d) suspend performance pending termination of this Agreement. The Non-Defaulting Party shall also have the right to pursue any other remedies available at law or in equity, including, where appropriate, specific performance or injunctive relief to the extent permitted under Article Twenty-Seven.

3.04. Calculation of Termination Payment.

If an Early Termination Date has been declared, the Non-Defaulting Party shall calculate, in a commercially reasonable manner, the “Termination Payment” in accordance with this Section 3.04.

- (a) Termination Payment Prior to Initial Delivery Date. If the Early Termination Date occurs before the Initial Delivery Date, then the Termination Payment shall be calculated in accordance with this Section 3.04(a).
- (i) If Seller is the Defaulting Party, then the Termination Payment shall be owed to SCE and shall be equal to the entire Delivery Date Security amount. SCE shall be entitled to immediately retain for its own benefit those funds held as Delivery Date Security, and any amount of Delivery Date Security that Seller has not yet posted with SCE will be immediately due and payable by Seller to SCE. There will be no amounts owed to Seller. The Parties agree that SCE’s damages in the event of an Early Termination Date prior to the Initial Delivery Date caused by Seller’s default would be difficult or impossible to determine and that the damages set forth in this Section 3.04(a)(i) are a reasonable approximation of SCE’s harm or loss.
- (ii) If SCE is the Defaulting Party, then the Termination Payment shall be owed to Seller and shall equal the sum of the actual, documented and verifiable costs incurred by Seller between the Effective Date and the Early Termination Date in connection with the Project, less the fair market value (determined in a commercially reasonable manner) of (A) all the Project’s assets individually, or (B) the entire Project, whichever is greater, regardless of whether or not any Project asset or the entire Project is actually sold or disposed of; *provided*, in no case shall such Termination Payment be greater than *[SCE Note: \$TBD]* or be less than zero dollars (\$0). There will be no amount owed to SCE. The Parties agree that Seller’s damages in the event of an Early Termination Date prior to the Initial Delivery Date caused by SCE’s default would be difficult or impossible to determine and that the damages set forth in this Section 3.04(a)(ii) are a reasonable approximation of Seller’s harm or loss.
- (b) Termination Payment After All Initial Delivery Dates Occur. If the Early Termination Date occurs after the Initial Delivery Date, then the Termination Payment shall be calculated in accordance with this Section 3.04(b).

The Termination Payment shall equal the sum of all amounts owed by the Defaulting Party to the Non-Defaulting Party under this Agreement, including a Forward Settlement Amount (if any), less any amounts owed by the Non-Defaulting Party to the Defaulting Party determined as of the Early Termination Date.

In addition, if SCE is the Non-Defaulting Party and SCE reasonably expects to incur monetary penalties or fines from the CPUC or the CAISO (or any other Governmental Authority having jurisdiction) because SCE will not be able to include the Contract Capacity in its then applicable Compliance Showing as a result of Seller's Event of Default, then SCE may, in good faith, estimate the amount of those penalties or fines and include this estimate in its determination of the Termination Payment, subject to accounting to Seller when those penalties or fines are finally ascertained. SCE shall use commercially reasonable efforts to minimize such fines and penalties; *provided*, in no event will SCE be required to use or change the utilization of its owned or controlled assets or market positions to minimize the fines and penalties. The rights and obligations with respect to determining and paying any Termination Payment, and any dispute resolution provisions with respect thereto, shall survive the termination of this Agreement and shall continue until after those penalties or fines are finally ascertained.

3.05. Notice of Termination Payment.

As soon as practicable after an Early Termination Date is declared, the Non-Defaulting Party shall provide Notice to the Defaulting Party of the Termination Payment. The Notice must include a written statement setting forth, in reasonable detail, the calculation of such Termination Payment, together with appropriate supporting documentation.

If the Termination Payment is owed to the Non-Defaulting Party, then the Defaulting Party shall pay such amount to the Non-Defaulting Party within five (5) Business Days after the Notice is provided. If the Termination Payment is owed to the Defaulting Party, then the Non-Defaulting Party shall pay such amount to the Defaulting Party within thirty (30) days after the Notice is provided.

The Parties shall negotiate in good faith to resolve any disputes regarding the calculation of the Termination Payment. Any Disputes which the Parties are unable to resolve through negotiation may be submitted for resolution through mediation and arbitration as provided in Article Twenty-Seven.

3.06. Limitation on Seller's Ability to Make or Agree to Third Party Sales from the Project/Storage Units after Early Termination Date.

If the Agreement is terminated by SCE prior to the Initial Delivery Date due to Seller's Event of Default, neither Seller nor Seller's Affiliates may sell, market or deliver any Energy, Capacity, Resource Adequacy Benefits or Ancillary Services associated with or attributable to a Storage Unit or the Project to a party other than SCE for a period of two (2) years following the Early Termination Date due to Seller's Event of Default, unless prior to selling, marketing or delivering such Product, or entering into the agreement to sell, market or deliver such Product to a party other than SCE, Seller or Seller's Affiliates provides SCE with a written offer to sell the Energy, Capacity, Resource Adequacy Benefits, or Ancillary Services which provides SCE the right to select in its sole discretion either the terms and conditions materially similar to the terms and conditions contained in this Agreement (including price) or the terms and conditions to which the third party agreed, and SCE fails to accept such offer within forty-five (45) days of SCE's receipt thereof.

Neither Seller nor Seller's Affiliates may sell or transfer the Project, or any part thereof, or land rights or interests in the Site (including the Interconnection Queue Position) so long as the limitations contained in this Section 3.06 apply, unless the transferee agrees to be bound by the terms set forth in this Section 3.06 pursuant to a written agreement approved by SCE.

Seller shall indemnify and hold SCE harmless from all benefits lost and other damages sustained by SCE as a result of any breach by Seller of its covenants contained within this Section 3.06.

3.07. Effect of Termination.

Termination of this Agreement shall not operate to discharge any liability which has been incurred by either Party prior to the effective date of such termination.

ARTICLE FOUR. TRANSMISSION

4.01. Interconnection Studies.

Seller represents and warrants that, as of the Effective Date, Seller has provided SCE with true and correct, up-to-date copies of all of the Interconnection Studies to enable delivery of the Storage Unit(s)' output to the Point of Interconnection pursuant to Applicable Law. Seller shall be responsible for all fees and costs associated with the following:

- (a) Obtaining all Interconnection Studies;

- (b) Maintaining, complying with and performing Seller's obligations under the interconnection agreement and related documents throughout the Delivery Period;
- (c) Funding for any Network Upgrades associated with or attributable to the Storage Unit or the Project (any refund of such fees and costs will be consistent with the Tariff);
- (d) Any Interconnection Facilities that are installed for the purpose of interconnecting the Project with existing transmission or distribution systems; and
- (e) All costs (including interconnection costs and transmission losses) arising from, relating to or associated with any WDAT interconnection agreement between Seller and SCE under which Energy from the Project is transmitted to the CAISO Grid.

4.02. SCE Termination Right – Excess Network Upgrade Costs.

SCE has the right to terminate this Agreement on Notice, which will be effective five (5) Business Days after such Notice is given to Seller, on or before the date that is sixty (60) days after Seller provides to SCE the results of any Interconnection Study or the interconnection agreement tendered to Seller by the PTO if:

- (a) Such Interconnection Study or agreement as of the date of the termination Notice, estimates, includes, specifies or reflects that the maximum total cost of transmission upgrades or new transmission facilities to SCE, or any PTO under the jurisdiction of the CAISO, including costs reimbursed by SCE, or any PTO under the jurisdiction of the CAISO, to Seller ("Aggregate Network Upgrade Costs"), may in the aggregate exceed *[dollar amount text]* dollars (\$*[Number]*) ("Network Upgrades Cap"), irrespective of any subsequent amendments of such Interconnection Study or agreement or any contingencies or assumptions upon which such Interconnection Study or agreement is based; or *{SCE Note: Monetary threshold to be based upon transmission-related costs allocated to the Project that SCE would incur as estimated in the most recent Interconnection Study.}*
- (b) SCE must procure transmission service from any other participating transmission owner to allow SCE to Schedule electric energy from the Project and the cost for such transmission service is not reimbursed or paid by Seller.

Notwithstanding anything to the contrary in this Section 4.02, SCE shall have no right to terminate this Agreement under this Section 4.02, if Seller, concurrently

with its provision of the relevant Interconnection Study or agreement pursuant to Section 6.02(a), irrevocably agrees that Seller shall owe to SCE (i) the amount by which the Aggregate Network Upgrade Costs exceed the Network Upgrades Cap (“Excess Network Upgrade Costs”), and (ii) any costs for transmission services specified in Section 4.02(b). If Seller elects to pay, without reimbursement, for the Excess Network Upgrade Costs pursuant to this Section 4.02, in no event shall Seller have any interest in or rights or title to any Network Upgrades or Congestion Revenue Rights in connection with the development of the Project or the delivery of Product to SCE pursuant to this Agreement.

If SCE exercises its termination right pursuant to this Section 4.02, no Termination Payment will be due or owing by either Party and Seller will be entitled to a return of any Delivery Date Security provided to SCE.

4.03. Acknowledgment.

Seller acknowledges and agrees that nothing in this Article Four is intended to abrogate, amend or modify the terms of any other agreement between it and SCE, including without limitation, the interconnection agreement, and that no breach under such other agreement shall excuse a Party’s nonperformance under this Agreement, unless the breach of such other agreement is also an Event of Default under this Agreement.

ARTICLE FIVE. DESIGN AND CONSTRUCTION OF STORAGE UNITS

5.01. Seller’s Obligations.

At no cost to SCE, Seller shall:

- (a) Design and construct, or refurbish the Project as required for Seller to perform its obligations under this Agreement;
- (b) Within *[number]* *[#]* days prior to the Expected Initial Delivery Date, Seller shall file all applications or other appropriate requests to acquire and maintain all permits, licenses, certifications and approvals necessary for the construction or refurbishment, operation and maintenance of the Project (the “Required Permits”), including permits to construct from the applicable Air Pollution Control District, or a Facility and Site Certification from the California Energy Commission (pursuant to California Public Resources Code Sections 25500-25543), as applicable, and obtain all Required Permits on or before *[Date]* (the “Required Permit Date”);

- (c) As applicable, complete all environmental impact assessments or studies conducted by or for Governmental Authorities pursuant to regulatory programs approved and certified under the California Environmental Quality Act, or environmental impact statements or studies conducted pursuant to the National Environmental Policy Act including obtaining public review and certification of any final documents relating to any environmental impact assessment or studies;
- (d) As required to achieve Commercial Operation for each Storage Unit, furnish and install all Protective Apparatus as SCE reasonably determines to be necessary for proper and safe operation of the Project in parallel with the PTO's electric system or CAISO Grid;
- (e) Furnish and install all equipment necessary to prevent, suppress and contain any fire, flooding, explosion, leak of hazardous material or other injury or damage at the Site ("Prevention Equipment");
- (f) Throughout the Delivery Period, maintain all permits, licenses, certifications and approvals necessary for the operation and maintenance of the Project;
- (g) Provide to SCE, prior to commencement of any construction activities on the Site, a report from an independent engineer (acceptable to both SCE and Seller) certifying that Seller has a written plan for the safe construction and operation of the Project in accordance with Prudent Electrical Practices; and
- (h) At least thirty (30) days prior to the Initial Delivery Date, Seller shall provide a completed Master File for the Project to SCE (which may be redacted by Seller to eliminate any portions reasonably believed by Seller to contain confidential information).

5.02. Changes in Operational Characteristics.

Seller shall provide to SCE Notice of any changes in the operational characteristics of the Project, for SCE's review as far in advance as practicable, but in no event less than thirty (30) days before the changes are to be made. Seller acknowledges that provision of Notice under this Section 5.02 is for SCE's information only and that by receiving such Notice, SCE makes no representation as to the economic or technical feasibility, operational capacity or reliability of any changes in the operational characteristics of the Project.

5.03. EPC Contractor.

Seller shall provide SCE with Notice of the name and address of Seller's EPC Contractor on the later of the Effective Date or the first (1st) Business Day after Seller enters into a contract with an EPC Contractor. If Seller does not have an

EPC Contractor selected by the Approval Date, Seller shall provide SCE with a shortlist of candidates by the Approval Date.

ARTICLE SIX.

CONSTRUCTION PERIOD AND MILESTONES

6.01. Milestone Schedule.

In order to meet the Expected Initial Delivery Date, Seller shall use reasonable efforts during the construction period to meet the various Project related milestones set forth in Appendix 6.01(A) ("Milestone Schedule") and avoid or minimize any delays in meeting such Milestone Schedule. No later than the tenth (10th) day of each month while the Project has not yet met its Initial Delivery Date, or within five (5) days of SCE's request, Seller shall deliver to SCE a monthly progress report, substantially in the form set forth in Appendix 6.01(B) ("Construction Report"), describing its progress in relation to the Milestone Schedule, including projected time to completion of any milestones, for each Storage Unit and the Project. Seller shall include in any Construction Report a list of all letters, notices, applications, approvals, authorizations and filings referring or relating to Required Permits, and shall provide any such documents as may be reasonably requested by SCE. In addition, Seller shall advise SCE, as soon as reasonably practicable, of any problems or issues of which Seller is aware which could materially impact its ability to meet the Milestone Schedule.

6.02. Provision of Information.

During the Term, Seller shall promptly provide SCE copies of:

- (a) Within ten (10) Business Days of receipt thereof, any Interconnection Study or the interconnection agreement tendered to Seller by the PTO and, concurrently with the provision of the first Interconnection Study or interconnection agreement tendered to Seller by the PTO that may give rise to a termination right of SCE under Section 4.02, Seller shall also provide SCE a Notice of its irrevocable election to exercise or not exercise its right to assume financial responsibility for any Excess Network Upgrade Costs pursuant to Section 4.02, with a failure to provide such an election deemed to be an election not to exercise such rights;
- (b) All agreements with providers of engineering, procurement, or construction services for the Project and all amendments thereto, including any EPC Contract (which may be redacted by Seller to eliminate any portions reasonably believed by Seller to contain confidential information);
- (c) Any reports, studies, or assessments done for Seller by an independent engineer; and

- (d) No later than twenty (20) days after each semi-annual period ending on June 30th and December 31st, a report listing all WMDVBES that supplied goods or services to Seller during such period, including any certifications or other documentation of such WMDVBES' status as such and the aggregate amount paid to WMDVBES during such period.
 - (i) SCE has the right to disclose to the CPUC all such information provided by Seller pursuant to this Section 6.02(d).
 - (ii) Seller shall make reasonable efforts to accommodate requests by the CPUC (or by SCE in response to a request by the CPUC) to audit Seller in order to verify data provided by Seller pursuant to this Section 6.02(d).

6.03. Inspection Rights.

SCE shall have the right at any time during the Term to enter onto the Site during normal business hours on any Business Day to inspect the Project and otherwise inspect or audit Seller's EPC Contracts and its books and records in order to verify Seller's compliance with the Milestone Schedule and other obligations under this Agreement. Seller shall, or shall cause its EPC Contractors to, provide SCE with access to the Site and all applicable documents and records in order to permit SCE to determine whether:

- (a) Seller has obtained and maintained all Required Permits, and that such Required Permits do not contain Permit Requirements that might restrict SCE's ability to charge or discharge, or store energy in, the Project as provided for in this Agreement;
- (b) All contracts described in Section 6.02(a) have been entered into and become effective on a timely basis and Seller is not in default thereunder; and
- (c) All contracts or other arrangements necessary to interconnect the Project (including transmission arrangements as contemplated in Article Four, electrical, water supply and waste disposal) have been entered into and become effective on a timely basis pursuant to the Milestone Schedule and Seller is not in default thereunder.

ARTICLE SEVEN.

COMMISSIONING AND TESTING

7.01. Testing Costs.

- (a) Seller may, at times and for durations reasonably agreed to by the Parties, conduct the Initial Commercial Operation Test and Contract Capacity & Ancillary Services Tests.
- (b) If testing is conducted during a Settlement Interval in which Seller receives a Dispatch Notice or Charging Notice for the Storage Unit(s) being tested, but only if such testing does not interfere with the Storage Unit(s) ability to meet the applicable Dispatch Notice or Charging Notice, or SCE orders Seller to initiate such testing (each, a “Buyer Dispatched Test”), Seller shall not (other than as set forth in Article Sixteen, or pursuant to any Energy Adjustment Payment or Energy Efficiency Capacity Reduction Payment) be obligated to pay for Charging Energy Costs relating to such Buyer Dispatched Test, and Energy shall be treated as dispatched by SCE hereunder.
- (c) If Seller schedules or conducts a test during any Settlement Intervals in which Seller has not received a Dispatch Notice or Charging Notice, or such test interferes with any Storage Unit’s ability to meet a Dispatch Notice or Charging Notice, for the Storage Unit(s) being tested (“Seller Initiated Test”), Seller shall pay for all costs (including Charging Energy Costs needed to conduct the Seller Initiated Test and Charging Energy Costs needed to charge the Storage Unit(s) to the same State of Charge such Storage Unit was prior to such Seller Initiated Test) relating to such Seller Initiated Test and, if SCE is the SC for the Project during the Seller Initiated Test, SCE shall pay to Seller, in the month following SCE’s receipt of CAISO revenues associated with such Seller Initiated Test, such revenues net of any (i) resource specific charge codes, (ii) Charging Energy Costs, (iii) penalties, or (iv) sanctions associated with the Energy charged or discharged during such Seller Initiated Test. Moreover, there shall be no Qualifying Delivered Energy, Variable O&M Payment, Energy Adjustment Payment, SDD Charge, SDD Administrative Charge for any Settlement Interval during which a Seller Initiated Test takes place. To the extent such Seller Initiated Test prevents SCE from charging or discharging the applicable Storage Units(s) as would have occurred absent such test, then, in accordance with Article Ten, such Storage Unit(s) will be deemed unavailable. Except as otherwise provided in Sections 7.02 and 7.03 and Appendix 7, Seller must notify SCE of any test at least eight (8) days in advance of the Trading Day for the date on which Seller proposes to conduct such test. For purposes of clarification, any test performed before the Initial Delivery Date is a Seller Initiated Test. With respect to any test performed after the Initial Delivery Date, Seller shall return any applicable Storage Unit(s) at the end of the Seller Initiated Test

to the same State of Charge immediately prior to the Seller Initiated Test set forth in this Section 7.01(b), and the Test shall not be deemed completed until the Storage Unit has been returned to such State of Charge.

- (d) When requesting a Seller Initiated Test, Seller shall also enter information into the Outage Management System, as well as provide Availability Notices reflecting such Seller Initiated Test, as set forth in Article Twenty.

7.02. Initial Commercial Operation Test.

At least thirty (30) days prior to the Expected Initial Delivery Date, Seller shall schedule and complete an Initial Commercial Operation Test for each Storage Unit. Such Initial Commercial Operation Test shall be scheduled and conducted in accordance with Appendix 7. Seller shall use commercially reasonable efforts to undertake such activities in sufficient time to achieve Commercial Operation of each Storage Unit by the Expected Initial Delivery Date and SCE will reasonably cooperate with Seller to meet such deadline.

- (a) The Initial Commercial Operation Test shall establish the Contract Capacity for purposes of calculating the Monthly Capacity Payment, and Appendix 1.01 and Appendix 9.02 shall be deemed to be amended to reflect the Contract Capacity certified during such test by SCE test personnel.
- (b) This test shall be deemed a Seller Initiated Test.

7.03. Contract Capacity & Ancillary Services Testing.

Once per Contract Year after the initial Contract Year, Seller shall, upon SCE's request, schedule and complete a Contract Capacity & Ancillary Services Test in accordance with Appendix 7. This test shall be deemed a Buyer Dispatched Test.

7.04. CAISO Certification.

Pursuant to Section 2.04(k), Seller is required to obtain CAISO Certification of the Project; *provided*, nothing in this Agreement, including the Appendices, shall be amended to reflect the outcome of this CAISO Certification. Notwithstanding the preceding sentence, SCE has the right to discharge and charge the Storage Unit(s) within the parameters established by the CAISO Certification of the Storage Units and to the Storage Unit(s)' P_{MAX} if enough energy is stored in the Storage Unit to meet its P_{MAX}.

ARTICLE EIGHT.

SELLER'S OPERATION, MAINTENANCE AND REPAIR OBLIGATIONS

8.01. Seller's Operation Obligations.

- (a) Seller shall operate the Project in accordance with Prudent Electrical Practices, Applicable Laws, Permit Requirements and applicable California utility industry standards, including the standards established by the California Electricity Generation Facilities Standards Committee pursuant to Public Utilities Code Section 761.3, if applicable, and enforced by the CPUC, and CAISO mandated standards, as amended from time to time (collectively, "Industry Standards").
- (b) Seller shall maintain a daily operations log for each Storage Unit which shall include information on charging and discharging (including charging and discharging efficiency), electric energy consumption and efficiency, State of Charge, availability (including availability to charge and discharge and its ability to store energy), maintenance performed, outages, changes in operating status, inspections and any other significant events related to the operation of each Storage Unit. In addition, Seller shall maintain all records applicable to each Storage Unit, including the electrical characteristics of the Storage Unit(s) and settings or adjustments of the Storage Unit(s) control equipment (including the power conversion system) and protective devices. Information maintained pursuant to this Section 8.01(b) shall be provided to SCE, within fifteen (15) days of SCE's request.
- (c) Seller shall maintain and provide to SCE, within fifteen (15) days of SCE's request, accurate records with respect to each Storage Unit(s)' Initial Commercial Operation Test and Contract Capacity & Ancillary Services Tests, including the outcomes of such Tests.
- (d) Seller shall maintain and make available to SCE and the CPUC, or any division thereof, records including logbooks, demonstrating that the Project is operated and maintained in accordance with Prudent Electrical Practices, Applicable Laws, Permit Requirements and Industry Standards, including CPUC General Order ("GO") 167, if applicable. Seller shall comply with all reporting requirements and permit on-site audits, investigations, tests and inspections permitted or required under any Applicable Laws, Permit Requirements, or Industry Standards.
- (e) At SCE's request, Seller shall make all reasonable efforts to deliver Energy to the Energy Delivery Point at an average rate of delivery at least equal to the Contract Capacity during periods of CAISO-declared system emergency.

- (f) SCE or the CAISO may require Seller, at Seller's expense, to demonstrate to SCE's reasonable satisfaction the correct calibration and operation of Seller's Protective Apparatus any time SCE or the CAISO has reason to believe that said Protective Apparatus may impair the integrity of the PTO's electric system or CAISO Grid.

8.02. Seller's Maintenance and Repair Obligations.

- (a) Seller shall inspect, maintain, and repair the Project and, if necessary, replace, each Storage Unit and Prevention Equipment, and any portion thereof, in accordance with applicable Industry Standards and Prudent Electrical Practices. Seller shall maintain, and deliver to SCE upon request, maintenance and repair records of each Storage Unit.
- (b) Subject to Section 8.02(c), Seller shall promptly make all necessary repairs to the Project or, if necessary, replacement of each Storage Unit, and any portion thereof, and take all actions necessary in order to provide the Product to SCE in accordance with the terms of this Agreement.
- (c) In the event that:
 - (i) a Contract Capacity & Ancillary Service Test demonstrates that:
 - (A) the Discharging Capacity of any single Storage Unit is less than or equal to *[TBD]* percent *[(#%)]* of the applicable SU Contract Capacity,
 - (B) the Charging Capacity of any single Storage Unit is less than or equal to *[TBD]* percent *[(#%)]* of the applicable SU Contract Capacity, or
 - (C) the Storage Capacity of any single Storage Unit is less than or equal to *[TBD]* percent *[(#%)]* of the applicable Maximum Storage Level,
 - (ii) an equipment failure with respect to any single Storage Unit results in:
 - (A) the Discharging Capacity of such Storage Unit being, less than or equal to *[TBD]* percent *[(#%)]* of the applicable SU Contract Capacity on average for a period of time exceeding seven (7) consecutive days,
 - (B) the Charging Capacity of such Storage Unit being, less than or equal to *[TBD]* percent *[(#%)]* of the applicable SU Contract Capacity on average for a period of time exceeding seven (7) consecutive days,

- (C) the Storage Capacity of such Storage Unit being, less than or equal to *[TBD]* percent *[(#%)]* of the applicable Maximum Storage Level on average for a period of time exceeding seven (7) consecutive days,

Seller shall repair or replace such Storage Unit in accordance with Prudent Electrical Practices and the procedure set forth in this Section 8.02. Within fourteen (14) days of any such failure, Seller shall complete a Successful Repair or present to SCE a description of the reason for the failure and a plan and schedule for completing a Successful Repair (the “Repair Plan”).

- (d) If SCE and Seller disagree about the Repair Plan, SCE may, at its expense, hire an independent third party engineering firm reasonably acceptable to Seller (the “Independent Engineer” or “IE”), to perform an on-site assessment of the situation and make recommendations for completing a Successful Repair. Upon two (2) Business Days’ Notice by SCE, Seller shall grant the IE and SCE personnel access to the Storage Unit(s) and all relevant information including log books, maintenance records and reports, and other applicable materials. If, after seven (7) days of the delivery to Seller of the IE’s engineering report, Seller fails, in any material respect to meet the IE’s recommendations (as such recommendations may be updated from time to time by the IE) for the Successful Repair, or make sufficient progress in effecting same, in each case as determined and reported by the IE, consistent with Industry Standards and Prudent Electrical Practices, SCE shall have the right in its sole discretion to (i) exercise its Storage Unit Removal Right; or (ii) declare an Event of Default pursuant to Section 3.02(o). Until a Successful Repair is demonstrated, the Storage Unit will be deemed unavailable for purposes of Article Ten; *provided*, upon Seller’s demonstration of a Successful Repair, the Storage Unit will be deemed available retroactive to the hour that such Successful Repair was completed.
- (e) If an Event of Default pursuant to Sections 3.02(n) has occurred, then SCE shall have the right in its sole discretion to (i) exercise its Storage Unit Removal Right; or (ii) declare an Event of Default pursuant to Section 3.02(n).
- (f) Seller shall not allow the Charging Capacity or Discharging Capacity of any Storage Unit to fall below *[TBD]* percent *[(#%)]* of the applicable SU Contract Capacity, or the Storage Capacity of any single Storage Unit to fall below *[TBD]* percent *[(#%)]* of the applicable Maximum Storage Level, on average for a period of

- (i) six (6) months (or such longer cure period identified as reasonable under the circumstances in the written report of an IE engaged by SCE) due to Force Majeure if the IE has determined in its written report that Seller should reasonably have been able to achieve a Successful Repair of the Storage Unit prior to the expiration of such six (6) month period (or longer cure period identified in the IE's written report); or
- (ii) sixty (60) days (whether or not consecutive) within a rolling twelve (12) month period (or such longer cure period identified as reasonable under the circumstances in the written report of an IE engaged by SCE) for any reason or circumstance, including Forced Outage, but excluding Planned Outage and Force Majeure if the IE has determined in its written report that Seller should reasonably have been able to achieve a Successful Repair of the Storage Unit prior to the expiration of such sixty (60) day period (or longer cure period identified in the IE's written report).

ARTICLE NINE.

CONTRACT CAPACITY, ASSOCIATED ENERGY AND ANCILLARY SERVICES; ENERGY ADJUSTMENT PAYMENT

9.01. Compensation.

Compensation to Seller for the Product shall consist of (a) a Monthly Capacity Payment or Reduced Monthly Capacity Payment calculated in accordance with Section 9.02; and (b) a Variable O&M Payment calculated in accordance with Section 9.04. Payments shall be adjusted in accordance with Article Ten and will be paid monthly, in arrears, in accordance with Article Eleven, for each month of the Delivery Period.

9.02. Monthly Capacity Payment.

For each Storage Unit, SCE shall make the Monthly Capacity Payment, payable in arrears, to Seller. The Monthly Capacity Payment for each Storage Unit for each month of the Delivery Period is set forth in Appendix 9.02 and is subject to reduction in accordance with this Agreement. If the Monthly Capacity Payment is reduced in accordance with this Agreement, SCE shall make the Reduced Monthly Capacity Payment in lieu of the Monthly Capacity Payment.

9.03. [Intentionally omitted].

9.04. Variable O&M Payment.

SCE shall pay Seller a “Variable O&M Payment” for each Storage Unit, calculated as follows:

$$\text{Variable O\&M Payment}_m = \text{Variable O\&M Charge}_y * \sum_i^n \text{Qualifying Delivered Energy}_i$$

where:

m = the relevant month within the Delivery Period being calculated

y = the Contract Year corresponding to month “m”

n = the number of Settlement Intervals in month “m”

i = the Settlement Interval in month “m”

9.05. Energy from Start-Up.

In addition to all Energy discharged after a Start-Up, all Energy discharged prior to the Storage Unit achieving a Start-Up during the respective start-up cycle shall be for SCE’s account.

9.06. Energy Adjustment Payment.

If, in a month during the Delivery Period, a Storage Unit’s Actual Efficiency Factor is less than or greater than the Energy Efficiency Tolerance Band, then an Energy Adjustment Payment for the Storage Unit for that month will be calculated as follows:

(a) The “Actual Efficiency Factor” for month “m” is given by:

$$AEF_m = \frac{\sum_i^N Discharge_i + Available Energy_{y_{end}} - Available Energy_{y_{beg}}}{\sum_i^N Charge_i}$$

where:

m = the relevant month within the Delivery Period being calculated

N = the number of Settlement Intervals in month “m”

i = the Settlement Interval in month “m”

$Discharge_i$ = the amount of energy (in MWh) discharged by the Storage Unit for the Settlement Interval “ i ” in month “ m ”

$Charge_i$ = the amount of energy (in MWh) used to charge the Storage Unit for the Settlement Interval “ i ” in month “ m ”

$Available\ Energy_{beg}$ = the amount of energy (in MWh) stored in the Storage Unit available for discharge at the end of the last Settlement Interval in the month preceding month “ m ”

$Available\ Energy_{end}$ = the amount of energy (in MWh) stored in the Storage Unit available for discharge at the end of the last Settlement Interval in month “ m ”

“Calculable Month” shall mean a month where $\sum_i^N Charge_i > 0$ and $0 \leq AEF_m \leq 1$

; *provided*, if for month “ m ”

(i) $\sum_i^N Charge_i = 0$,

(ii) $AEF_m > 1$, or

(iii) $AEF_m < 0$,

then

(x) there shall be no Energy Adjustment Payment for such month,

(y) the Actual Efficiency Factor and the Energy Adjustment Payment calculated for the next month that is a Calculable Month (the “Calculated Month”) shall be based on all of the $Discharge_i$ and $Charge_i$ Settlement Interval data for the period after the most recent Calculable Month that is not the Calculated Month until the end of the Calculated Month (the “Energy Adjustment Period”) and the $Available\ Energy_{beg}$ shall be the amount of energy (in MWh) stored in the Storage Unit available for discharge at the end of the last Settlement Interval in the month preceding the first month of the Energy Adjustment Period and $Available\ Energy_{end}$ shall be the amount of energy (in MWh) stored in the Storage Unit available for discharge at the end of the last Settlement Interval of the Calculated Month, and

(z) no Energy Efficiency Capacity Payment Reduction shall be applied to the Reduced Monthly Capacity Payment for such

month until an Actual Efficiency Factor can be calculated pursuant to subsection (y), and such Actual Efficiency Factor shall be used to calculate the Energy Efficiency Capacity Payment Reduction, if any, for each month in the Energy Adjustment Period and shall be applied to the Reduced Monthly Capacity Payment for each month in the Energy Adjustment Period. Any adjustment made under this subsection (z) shall be made retroactively pursuant to Section 11.03.

- (b) The deviation from the Guaranteed Efficiency Factor Min for month “*m*” is:

$$\delta_{\text{Min}} = \frac{AEF_m - GEF^{\text{Min}}}{GEF^{\text{Min}}}$$

where:

m = the relevant month within the Delivery Period being calculated

GEF^{Min} = the applicable Guaranteed Efficiency Factor Min for the Storage Unit as set forth in Appendix 1.01

- (c) The deviation from the Guaranteed Efficiency Factor Max for month “*m*” is:

$$\delta_{\text{Max}} = \frac{AEF_m - GEF^{\text{Max}}}{GEF^{\text{Max}}}$$

where:

m = the relevant month within the Delivery Period being calculated

GEF^{Max} = the applicable Guaranteed Efficiency Factor Max for the Storage Unit as set forth in Appendix 1.01

- (d) The “Energy Efficiency Tolerance Band” is from GEF^{Min} to GEF^{Max} , inclusive.

- (e) The “Energy Adjustment Payment” for month “*m*” shall be as follows:

If $GEF^{\text{Min}} \leq AEF_m \leq GEF^{\text{Max}}$, then the Energy Adjustment Payment shall be zero dollars (\$0).

If $AEF_m < GEF^{Min}$, then the Energy Adjustment Payment will be negative and will result in a payment to SCE from Seller, calculated as follows:

$$\text{Energy Adjustment Payment} = \left(\sum_i^N \text{Charge}_i \right) * \delta_{\text{Min}} * p_m^w$$

where:

m = the relevant month within the Delivery Period being calculated

N = the number of Settlement Intervals in month “ m ”

i = the Settlement Interval in month “ m ”

δ_{Min} = the deviation from the Guaranteed Efficiency Factor Min calculated above for month “ m ”

p_m^w = the weighted-average price over all the Settlement Intervals for month “ m ” calculated as:

$$p_m^w = \sum_i^N P_i * \frac{\text{Charge}_i}{\text{Total Charge}}$$

where:

i = the Settlement Interval in month “ m ”

N = the number of Settlement Intervals in month “ m ”

P_i = the LMP at the pNode for the Storage Unit for Settlement Interval “ i ”

Charge_i = the amount of energy (in MWh) used to charge the Storage Unit for the Settlement Interval “ i ” in month “ m ”

$$\text{Total Charge} = \sum_i^N \text{Charge}_i, \text{ for month “}m\text{”}$$

If $AEF_m > GEF^{Max}$, then the Energy Adjustment Payment will be positive and result in a payment to Seller from SCE, calculated as follows:

$$\text{Energy Adjustment Payment} = \left(\sum_i^N \text{Charge}_i \right) * \delta_{\text{Max}} * p_m^w$$

where:

m = the relevant month within the Delivery Period being calculated

N = the number of Settlement Intervals in month “ m ”

i = the Settlement Interval in month “ m ”

δ_{Max} = the deviation from the Guaranteed Efficiency Factor Max calculated above for month “ m ”

p_m^w = the weighted-average price over all the Settlement Intervals for month “ m ” calculated as:

$$p_m^w = \sum_i^N P_i * \frac{\text{Charge}_i}{\text{Total Charge}}$$

where:

i = the Settlement Interval in month “ m ”

N = the number of Settlement Intervals in month “ m ”

P_i = the LMP at the pNode for the Storage Unit for Settlement Interval “ i ”; *provided*, P_i shall be no greater than the “energy charge” rate (under the column headers “Delivery Service” and “Generation”) set forth in SCE Tariff Rate Schedule TOU-8 Time-of-Use-General Service-Large for “Service Metered and Delivered at Voltages above 50 kV”, or successor, that corresponds to Settlement Interval “ i ”

Charge_i = the amount of energy (in MWh) used to charge the Storage Unit for the Settlement Interval “ i ” in month “ m ”

$$\text{Total Charge} = \sum_i^N \text{Charge}_i, \text{ for month “}m\text{”}$$

ARTICLE TEN.

ADJUSTMENTS TO MONTHLY CAPACITY PAYMENT

10.01. Availability.

- (a) Allocation of Standard Capacity Product Payments and Charges. If the Project is subject to the terms of the Availability Standards, Non-Availability Charges, and Availability Incentive Payments as contemplated under the Tariff, any Availability Incentive Payments will be for the benefit of Seller and for Seller's account and any Non-Availability Charges will be the responsibility of Seller and for Seller's account.
- (b) RA Capacity Reduction. If, at any time during the Delivery Period, any of the Storage Unit's Net Qualifying Capacity does not equal its SU Contract Capacity, then the SU Contract Capacity (and the corresponding Monthly Capacity Payment) for such Storage Unit shall be automatically amended to equal the Storage Unit's Net Qualifying Capacity; *provided*, in no event shall such SU Contract Capacity be greater than the applicable SU Contract Capacity as of SCE's acceptance of the Initial Commercial Operation Test, in accordance with Part II.L. of Appendix 7.
- (c) Rated Power Capacity Payment Reduction. If, regardless of cause including without limitation by reason of Force Majeure, Forced Outage or Planned Outage, (A) the Available Discharging Capacity, Available Charging Capacity, or Available Storage Capacity of a Storage Unit is less than its SU Contract Capacity in any Settlement Interval in a month during the Delivery Period, or (B) the Qualifying Delivered Energy from a Storage Unit is less than the Performance Tolerance Band Lower Limit in any Settlement Interval in a month during the Delivery Period, then the Rated Power Capacity Payment Reduction for the affected Storage Unit for that month will be calculated as follows:
- (i) For each Settlement Interval in the month, the "Price-Weighted Capacity Availability" is calculated as follows:

$$\text{Price-Weighted Capacity Availability}_i = (\text{AMCP}_{h(i)} * \text{Capacity Availability}_i) / \text{AMCP}_{\text{avg}(m)}$$

where:

i = the Settlement Interval in month "m"

$$\text{AMCP} = \begin{cases} \text{MCP}, & \text{if } \text{MCP} \geq 0 \\ 0, & \text{if } \text{MCP} < 0 \end{cases}$$

$h(i)$ = the Trading Hour corresponding to Settlement Interval “i” being calculated

$avg(m)$ = the simple average over all Settlement Intervals in month “m”

For purposes of such calculation, Capacity Availability for any Settlement Interval shall not exceed the applicable SU Contract Capacity.

- (ii) Using the Price-Weighted Capacity Availability calculated above, the “Price-Weighted Monthly Capacity Availability” for month “m” is calculated as follows:

$$\text{Price-Weighted Monthly Capacity Availability}_m = \sum_{i=1}^n \text{Price-Weighted Capacity Availability}_i$$

where:

m = the relevant month within the Delivery Period being calculated

n = the number of Settlement Intervals in month “m”

i = the Settlement Interval in month “m”

- (iii) Using the Price-Weighted Monthly Capacity Availability calculated above, the “Capacity Price Adjustment Factor” for month “m” is calculated as follows:

$$\text{Capacity Price Adjustment Factor}_m = \text{Price-Weighted Monthly Capacity Availability}_m / (Q * n)$$

where:

m = the relevant month within the Delivery Period being calculated

Q = the SU Contract Capacity

n = the number of Settlement Intervals in month “m”

- (iv) Finally, using the Capacity Price Adjustment Factor calculated above, the “Rated Power Capacity Payment Reduction” for month “m” is calculated as follows:

Rated Power Capacity Payment Reduction_m = 0.50 * Monthly Capacity Payment * (1 – Capacity Price Adjustment Factor)

For purposes of calculating the Rated Power Capacity Payment Reduction in this subsection (iv), the Monthly Capacity Payment is the Monthly Capacity Payment applicable to the Storage Unit as set forth in Appendix 9.02.

- (d) A/S Capacity Payment Reduction. If, regardless of cause including without limitation by reason of Force Majeure, Forced Outage or Planned Outage, for each Ancillary Service listed in Appendix 1.01, the A/S Availability of a Storage Unit is less than the applicable A/S Maximum Capacity quantity specified in Appendix 1.01 in any Settlement Interval of a month, then the A/S Capacity Payment Reduction for the Storage Unit for that month will be calculated as follows:

- (i) The “Monthly Available A/S Capacity” for month “m” is calculated as follows:

$$\text{Monthly Available A/S Capacity}_m = \sum_k \sum_i^n \text{A/S Availability}_{i,k}$$

where:

m = the relevant month within the Delivery Period being calculated

n = the number of Settlement Intervals in month “m”

i = the Settlement Interval in month “m”

k = the applicable Ancillary Service

For purposes of such calculation, for each Ancillary Service, A/S Availability for any Settlement Interval shall not exceed the applicable A/S Maximum Capacity quantity specified in Appendix 1.01.

- (ii) Using the Monthly Available A/S Capacity calculated above, the “A/S Price Adjustment Factor” for month “m” is calculated as follows:

$$\text{A/S Price Adjustment Factor}_m = \text{Monthly Available A/S Capacity}_m / \left(\sum_k \text{A/S Maximum Capacity}_k * n \right)$$

where:

The applicable A/S Maximum Capacity is set forth in Appendix 1.01

m = the relevant month within the Delivery Period being calculated

n = the number of Settlement Intervals in month “m”

k = the applicable Ancillary Service

- (iii) Using the A/S Price Adjustment Factor calculated above, the “A/S Capacity Payment Reduction” for month “m” is calculated as follows:

$$\text{A/S Capacity Payment Reduction}_m = 0.50 * \text{Monthly Capacity Payment} * (1 - \text{A/S Price Adjustment Factor})$$

For purposes of calculating the A/S Capacity Payment Reduction in this subsection (iii), the Monthly Capacity Payment is the Monthly Capacity Payment applicable to the Storage Unit as set forth in Appendix 9.02.

10.02. Energy Efficiency Capacity Payment Reduction.

If, in a month during the Delivery Period, a Storage Unit’s Actual Efficiency Factor is less than the Guaranteed Efficiency Factor Min, then the Energy Efficiency Capacity Payment Reduction for the Storage Unit for that month will be calculated as follows:

AEF_m = Actual Efficiency Factor for month “m” calculated pursuant Section 9.06(a)

GEF^{Min} = the applicable Guaranteed Efficiency Factor Min for the Storage Unit as set forth in Appendix 1.01

If $GEF^{Min} \leq AEF_m$, then no adjustment is made.

If $AEF_m < GEF^{Min}$, then the “Energy Efficiency Capacity Payment Reduction”, using the deviation from the Guaranteed Efficiency Factor Min (δ_{Min}) for month m calculated pursuant to Section 9.06(b), is calculated as follows:

$$\text{Energy Efficiency Capacity Payment Reduction}_m = (\text{Monthly Capacity Payment} - (\text{Rated Power Capacity Payment Reduction} + \text{A/S Capacity Payment Reduction})) * \delta_{Min} * -1.$$

For purposes of calculating the Energy Efficiency Capacity Payment Reduction in this Section 10.02, the Monthly Capacity Payment is the Monthly Capacity Payment applicable to the Storage Unit as set forth in Appendix 9.02.

10.03. Reduced Monthly Capacity Payment.

The “Reduced Monthly Capacity Payment” for each Storage Unit shall be equal to (i) the applicable Monthly Capacity Payment less (ii) the sum of (A) the Rated Power Capacity Payment Reduction for such Storage Unit, (B) the A/S Capacity Payment Reduction for such Storage Unit, and (C) the Energy Efficiency Capacity Payment Reduction.

ARTICLE ELEVEN. PAYMENT AND BILLING

11.01. Billing Period.

The calendar month shall be the standard period for all payments under this Agreement (other than Termination Payments). As soon as practicable after the end of each month, each Party will render to the other Party an invoice for the payment obligations, if any, incurred hereunder during the preceding month (the “Obligation Month”), together with all supporting documentation and calculations reasonably necessary to evidence all amounts charged thereunder. An invoice can only be adjusted or amended after it was originally rendered within the time frames set forth in Section 11.03, below. If an invoice is not rendered within twenty-four (24) months after the close of the Obligation Month, the right to any payment for that Obligation Month under this Agreement is waived.

11.02. Timeliness of Payment.

All invoices under this Agreement shall be due and payable in accordance with each Party’s invoice instructions on or before the later of the twentieth (20th) day of the month in which the owing Party receives the invoice, or the tenth (10th) day after the owing Party’s receipt of the invoice, or, if such day is not a Business Day, then on the next Business Day. Each Party will make payments by electronic funds transfer, or by other mutually agreeable methods, to the account designated by the other Party. Any amounts not paid by the due date, including amounts in dispute pursuant to Section 11.03, will be deemed delinquent and will accrue interest at the Interest Rate, such interest to be calculated from and including the due date to but excluding the date the delinquent amount is paid in full.

11.03. Disputes and Adjustments of Invoices.

A Party may adjust any invoice rendered by it for an Obligation Month to correct any arithmetic or computational error, include additional charges or claims, or make an adjustment pursuant to Section 9.06(a)(z) within twelve (12) months after the close of such Obligation Month. A receiving Party may, in good faith, dispute the correctness of any invoice or of any adjustment to any invoice previously rendered to it by providing Notice to the other Party within the later of (i) twelve (12) months of the date of receipt of such invoice or adjusted invoice, or (ii) twelve (12) months after the close of the Obligation Month. Failure to provide such Notice within the time frames set forth in the preceding sentence waives the dispute with respect to such invoice. A Party disputing all or any part of an invoice or an adjustment to an invoice previously rendered to it shall pay the undisputed portion of the invoice when due, but shall have the option, in its sole discretion, to withhold payment of the disputed amount; *provided*, such Party must provide Notice to the other Party of the basis for and amount of the disputed portion of the invoice that has not been paid. The disputed portion of the invoice must be paid within two (2) Business Days of resolution of the dispute, along with interest accrued at the Interest Rate from and including the original due date of the invoice to but excluding the date the disputed portion of the invoice is paid in full. Inadvertent overpayments shall be returned upon request or deducted by the Party receiving such overpayment from subsequent payments, with interest accrued at the Interest Rate from and including the date of such overpayment but excluding the date repaid or deducted by the Party receiving such overpayment.

11.04. Netting Rights.

SCE reserves the right to net amounts that would otherwise be due to Seller under this Agreement against payment of any amounts owed to SCE by Seller arising out of, or related to, this Agreement and any other SCE agreement, tariff, obligation or liability. Nothing in this Section 11.04 limits SCE's rights under applicable tariffs, other agreements or Applicable Law.

ARTICLE TWELVE. [INTENTIONALLY OMITTED.]

ARTICLE THIRTEEN. CREDIT AND COLLATERAL

13.01. Financial Information.

If requested by one Party, the other Party shall deliver the following financial statements, which in all cases must be for the most recent accounting period and prepared in accordance with GAAP:

- (a) Within one hundred twenty (120) days following the end of each fiscal year, a copy of its annual report containing audited consolidated financial statements (income statement, balance sheet, statement of cash flows and statement of retained earnings and all accompanying notes) for such fiscal year, setting forth in each case in comparative form the figures for the previous year; and
- (b) Within sixty (60) days after the end of each of its first three fiscal quarters of each fiscal year, a copy of its quarterly report containing consolidated financial statements (income statement, balance sheet, statement of cash flows and statement of retained earnings and all accompanying notes) for such fiscal quarter and the portion of the fiscal year through the end of such quarter, setting forth in each case in comparative form the figures for the previous year.

In all cases the statements shall be for the most recent accounting period and prepared in accordance with GAAP. In each case, the financial statements specified above must be certified in accordance with all Applicable Laws and regulations, including all applicable SEC rules and regulations, if such Party is a SEC reporting company, or certified by a Responsible Officer as being fairly stated in all material respects (subject to normal year end audit adjustments) if such Party is not a SEC reporting company.

If a Party's financial statements are publicly available electronically on the website of that Party or the SEC, then the Party shall be deemed to have met the requirements of this Section 13.01. Should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default so long as the producing Party diligently pursues the preparation, certification and delivery of the statements.

13.02. Seller's Credit Requirements.

- (a) Credit Requirement After Effective Date. Seller shall post and thereafter maintain delivery date security collateral ("Delivery Date Security") equal to forty-five dollars (\$45) for each kilowatt of the total Expected Contract Capacity. Seller shall post the Delivery Date Security in accordance with the following terms and conditions:
 - (i) Seller shall post one-half of the Delivery Date Security within two (2) Business Days following the Effective Date, with the remainder to be posted within two (2) Business Days after Final CPUC Approval is obtained or waived by SCE in its sole discretion;
 - (ii) The Delivery Date Security shall be held by SCE as collateral security for Seller's obligation to meet the Expected Initial Delivery Date;

- (iii) The Delivery Date Security must be in the form of either a cash deposit or a Letter of Credit;
- (iv) If Seller posts any Delivery Date Security in cash, Seller will receive Simple Interest payments in accordance with the procedure specified in Section 13.03(a) of this Agreement; and
- (v) If Seller provides the Delivery Date Security by means of a Letter of Credit, such Letter of Credit must be provided substantially in the form of Appendix 13.03(b).

In the event SCE draws Daily Delay Damages from the Delivery Date Security, Seller shall not be required to replenish the drawn amount.

- (b) Return of Delivery Date Security. Within five (5) Business Days following the Initial Delivery Date, or upon termination of this Agreement pursuant to Section 2.02 or Section 4.02, SCE shall return to Seller the Delivery Date Security, less any Daily Delay Damages SCE has retained if the Initial Delivery Date is after the Expected Initial Delivery Date. If Seller achieves an Initial Delivery Date for the Project by the Expected Initial Delivery Date, SCE shall return to Seller the entire amount of the Delivery Date Security held by SCE.

- (c) Credit Requirements During Delivery Period.

During the Delivery Period, Seller shall post and maintain Performance Assurance in an amount equal to ten percent (10%) of the sum of the estimated Monthly Capacity Payments for all of the Storage Unit(s) for the lesser of (i) the current month and all remaining months of the Delivery Period, or (ii) the current month and the next thirty-five (35) months, with such estimated Monthly Capacity Payments not being subject to reduction, change or adjustment pursuant to Article Ten, or any other provision in this Agreement. Seller shall post the Performance Assurance in accordance with the following terms and conditions:

- (i) Performance Assurance must be in the form of either a cash deposit or a Letter of Credit;
- (ii) Performance Assurance shall be posted to SCE and maintained at all times during the Term and thereafter until such time as Seller has satisfied all monetary obligations which survive any termination of this Agreement;
- (iii) If Seller posts any Performance Assurance in cash, Seller will receive Simple Interest payments in accordance with the procedure specified in Section 13.03(a) of this Agreement; and

- (iv) If Seller provides Performance Assurance by means of a Letter of Credit, such Letter of Credit must be provided substantially in the form of Appendix 13.03(b).

Notwithstanding any other provision in this Agreement, SCE is not required to provide Performance Assurance to Seller.

13.03. Administration of Performance Assurance.

- (a) Interest Payments on Cash. Performance Assurance posted in cash shall earn Simple Interest. Seller shall provide a monthly invoice to SCE that sets forth the calculation of the interest amount due and SCE shall make payment thereof by the later of the third (3rd) Business Day (so long as no Event of Default has occurred and is continuing with respect to Seller):

- (i) of the first (1st) month after the month to which the invoice relates; or

- (ii) after the day on which such invoice is received.

On or after the occurrence of an Event of Default by Seller, SCE shall retain any such interest amount as additional Performance Assurance hereunder for so long as such Event of Default is continuing or the obligations of Seller under this Agreement have not been satisfied.

- (b) Letters of Credit. Performance Assurance provided in the form of a Letter of Credit shall be substantially in the form set forth in Appendix 13.03(b), issued by a Qualified Institution acceptable to SCE, and subject to the following provisions:

- (i) Each Letter of Credit shall be maintained for the benefit of SCE. Seller shall:

- (A) renew or cause the renewal of each outstanding Letter of Credit on a timely basis as provided in the relevant Letter of Credit;

- (B) if the Qualified Institution that issued an outstanding Letter of Credit has indicated its intent not to renew such Letter of Credit, provide a substitute Letter of Credit or alternative Performance Assurance acceptable to SCE at least twenty (20) Business Days prior to the expiration of the outstanding Letter of Credit; and

- (C) if the Qualified Institution issuing a Letter of Credit fails to honor SCE's properly documented request to draw on an outstanding Letter of Credit, provide a substitute Letter of

Credit or alternative Performance Assurance acceptable to SCE, in its sole discretion, within one (1) Business Day after such refusal;

provided, if Seller fails to perform in accordance with (A), (B), or (C) above, Seller shall be deemed to have failed to meet its obligation to provide Performance Assurance or Delivery Date Security.

- (ii) Upon the occurrence of a Letter of Credit Default, Seller shall provide to SCE either a substitute Letter of Credit or alternative Performance Assurance acceptable to SCE, in each case on or before the first (1st) Business Day after the occurrence thereof (or the fifth (5th) Business Day after the occurrence thereof if only clause (a) under the definition of Letter of Credit Default applies);
- (iii) Upon, or at any time after SCE has determined that Seller (A) has forfeited all or part of its Delivery Date Security, or (B) owes Daily Delay Damages pursuant to Section 2.05(a), then SCE may draw on any undrawn portion of any outstanding Letter of Credit. Cash proceeds received by SCE from drawing upon the Letter of Credit shall be for the account of SCE.
- (iv) Upon, or at any time after, the occurrence and continuation of an Event of Default by Seller, then SCE may draw on the entire undrawn portion of any outstanding Letter of Credit upon submission to the Qualified Institution issuing such Letter of Credit of one or more certificates specifying that such Event of Default has occurred and is continuing. Cash proceeds received by SCE from drawing upon the Letter of Credit shall be deemed Performance Assurance as security for Seller's obligations to SCE under this Agreement and SCE shall have the rights and remedies set forth in Section 13.05 with respect to such cash proceeds. Notwithstanding SCE's receipt of cash proceeds of a drawing under the Letter of Credit, Seller shall remain liable (A) for any failure to provide sufficient Performance Assurance or (B) for any amounts owing to SCE and remaining unpaid after the application of the amounts so drawn by SCE.
- (v) In all cases, the costs and expenses of establishing, renewing, substituting, canceling, amending and increasing the amount of a Letter of Credit shall be borne by Seller.

13.04. First Priority Security Interest.

To secure Seller's performance of its obligations under this Agreement, and until released as provided herein, Seller hereby grants to SCE a present and continuing first-priority security interest ("Security Interest") in, and lien on (and right of setoff against), and assignment of the Performance Assurance, and any and all proceeds resulting therefrom or the liquidation thereof, whether now or hereafter held by, on behalf of, or for the benefit of SCE, and Seller agrees to take such action as SCE reasonably requires in order to perfect SCE's Security Interest in, and lien on (and right of setoff against), such collateral and any and all proceeds resulting therefrom or from the liquidation thereof. Upon or any time after the occurrence or deemed occurrence and during the continuation of an Event of Default or an Early Termination Date, SCE may do any one or more of the following:

- (a) Exercise any of its rights and remedies with respect to all Performance Assurance, including any such rights and remedies under law then in effect;
- (b) Exercise any of its rights of setoff against any and all property of Seller in SCE's possession;
- (c) Draw on any outstanding Letter of Credit issued for its benefit; and
- (d) Liquidate all Performance Assurance then held by or for the benefit of SCE free from any claim or right of any nature whatsoever of Seller, including any equity or right of purchase or redemption by Seller.

SCE shall apply the proceeds of the collateral realized upon the exercise of any such rights or remedies to reduce Seller's obligations under this Agreement (Seller remaining liable for any amounts owing to SCE after such application), subject to SCE's obligation to return any surplus proceeds remaining after such obligations are satisfied in full.

13.05. Uniform Commercial Code Waiver.

This Agreement sets forth the entirety of the agreement of the Parties regarding credit, collateral, financial assurances and adequate assurances. Except as expressly set forth in this Agreement, including, but not limited to, those provisions set forth in Article Thirteen and Article Three, neither Party:

- (a) has or will have any obligation to post margin, provide letters of credit, pay deposits, make any other prepayments or provide any other financial assurances, in any form whatsoever, or
- (b) will have reasonable grounds for insecurity with respect to the creditworthiness of a Party that is complying with the relevant provisions

of Article Thirteen and Article Three of this Agreement; and all implied rights relating to financial assurances arising from Section 2-609 of the Uniform Commercial Code or case law applying similar doctrines, are hereby waived.

ARTICLE FOURTEEN. COLLATERAL ASSIGNMENT

14.01. Consent to Collateral Assignment.

Subject to the provisions of this Article Fourteen, Seller shall have the right to assign this Agreement to Lender as collateral for any financing or refinancing of the Project; *provided*, Seller shall be responsible for SCE's reasonable costs associated with the preparation, review, execution and delivery of documents in connection with any such assignment, including without limitation attorneys' fees. SCE shall in good faith work with Seller and Lender to agree upon a consent to collateral assignment of this Agreement ("Collateral Assignment Agreement"). The Collateral Assignment Agreement shall be in form and substance agreed to by SCE, Seller and Lender, and shall include, among others, the following provisions:

- (a) SCE shall give Notice of an Event of Default by Seller, to the persons to be specified by Lender in the Collateral Assignment Agreement, prior to exercising its right to terminate the Agreement as a result of such Event of Default.
- (b) Following an Event of Default by Seller under this Agreement, SCE may require Seller or Lender to provide to SCE a report setting forth:
 - (i) the status of efforts by Seller or Lender to develop a plan to cure the Event of Default;
 - (ii) impediments to the cure plan or its development;
 - (iii) if a cure plan has been adopted, the status of the cure plan's implementation (including any modifications to the plan as well as the expected timeframe within which any cure is expected to be implemented); and
 - (iv) any other information which SCE may reasonably require related to the development, implementation and timetable of the cure plan.

Seller or Lender shall provide the report to SCE within ten (10) Business Days of Notice from SCE requesting the report. SCE shall have no further right to require the report with respect to a particular Event of Default after that Event of Default has been cured.

- (c) Lender shall have the right to cure an Event of Default on behalf of Seller, only if Lender sends a written notice to SCE prior to the end of any cure period indicating Lender's intention to cure. Lender must remedy or cure the Event of Default within the cure period under the Agreement; *provided*, such cure period may, in SCE's sole discretion, be extended by no more than an additional one hundred eighty (180) days.
- (d) Lender shall have the right to consent prior to any termination of the Agreement which does not arise out of an Event of Default.
- (e) Lender shall receive prior Notice of, and the right to approve, material amendments to the Agreement, which approval shall not be unreasonably withheld, delayed or conditioned.
- (f) In the event Lender, directly or indirectly, takes possession of, or title to the Project (including possession by a receiver or title by foreclosure or deed in lieu of foreclosure), Lender shall assume all of Seller's obligations arising under the Agreement and all related agreements (subject to such limits on liability as are mutually agreed to by Seller, SCE and Lender as set forth in the Collateral Assignment Agreement). Lender shall have no personal liability for any monetary obligations of Seller under the Agreement which are due and owing to SCE as of the assumption date; *provided*, if, prior to such assumption, SCE advises Lender that SCE will require that Lender cure (or cause to be cured) any Event of Default existing as of the assumption date in order to avoid the exercise by SCE (in its sole discretion) of SCE's right to terminate the Agreement in respect of such Event of Default, then Lender, at its option and in its sole discretion, may elect to either (i) cause such Event of Default to be cured, or (ii) assume Seller's obligations under the Agreement and all related agreements, including the pre-assumption payment obligations that are otherwise excluded.
- (g) If Lender elects to sell or transfer the Project (after Lender directly or indirectly, takes possession of, or title to the Project), or sale of the Project occurs through the actions of Lender (for example, a foreclosure sale where a third party is the buyer, or otherwise), then Lender must cause the transferee or buyer to assume all of Seller's obligations arising under this Agreement and all related agreements as a condition of the sale or transfer. Such sale or transfer may be made only to an entity with financial qualifications (including, collateral support and any other additional security as may be required by SCE) and operating experience at least equivalent to Seller as of the Effective Date, as determined by SCE in its sole discretion.
- (h) If this Agreement is rejected in Seller's bankruptcy or otherwise terminated in connection therewith and if Lender or its designee, directly

or indirectly, takes possession of, or title to, the Project (including possession by a receiver or title by foreclosure or deed in *lieu* of foreclosure), Lender shall or shall cause its designee to promptly enter into a new agreement with SCE having substantially the same terms as this Agreement. Notwithstanding the foregoing, SCE shall not be required to enter into such agreement with Lender or such designee if there has been a change in circumstances resulting from actions of Seller in its bankruptcy case that would, in SCE's judgment, materially impact the rights or obligations of SCE under such agreement.

- (i) Seller shall reimburse, or shall cause Lender to reimburse, SCE for all reasonable and direct third party expenses (including the reasonable fees and expenses of counsel of SCE's choice) incurred by SCE in the preparation, negotiation, execution and/or delivery of any documents required under this Article Fourteen, or otherwise requested by Seller or Lender in connection with this Article Fourteen.

ARTICLE FIFTEEN. GOVERNMENTAL AND ENVIRONMENTAL CHARGES

15.01. Governmental Charges.

Seller shall pay or cause to be paid all taxes, charges or fees imposed by a Governmental Authority ("Governmental Charges") on or with respect to the Product at or before the Energy Delivery Point. SCE shall pay or cause to be paid all Governmental Charges on or with respect to Product after the Energy Delivery Point. In the event Seller is required by Applicable Laws to remit or pay Governmental Charges which are SCE's responsibility hereunder, SCE shall promptly reimburse Seller for such Governmental Charges. If SCE is required by Applicable Laws to remit or pay Governmental Charges which are Seller's responsibility hereunder, SCE may deduct the amount of any such Governmental Charge from any amounts due to Seller under Article Eleven of this Agreement. Nothing shall obligate or cause a Party to pay or be liable to pay any Governmental Charges for which it is exempt under Applicable Laws.

15.02. Compliance with Laws and Indemnification.

Seller shall be responsible for obtaining and maintaining all Required Permits, and shall construct and operate the Project in compliance with all Applicable Laws and Permit Requirements for the Term, including any new or revised Required Permits or Applicable Laws that become effective during the Term. Seller shall be solely responsible for any fines, penalties or other charges which result from Seller's failure to obtain or maintain such Required Permits and/or operate the Project in accordance with Applicable Laws and Permit

Requirements. No such fines, penalties or charges shall be passed through to SCE and Seller shall indemnify, defend and hold SCE harmless from and against all liabilities, damages, claims, losses, costs or expenses (including attorneys' fees) incurred by or brought against SCE in connection with all Required Permits and compliance with Applicable Laws and Permit Requirements.

15.03. Environmental Costs and Indemnification.

Seller is solely responsible for all Environmental Costs, all GHG Charges, any AB 32 Compliance Obligation, and all other costs associated with the implementation and regulation of Greenhouse Gas emissions (whether in accordance with AB 32 or any other federal, state or local legislation to offset or reduce any Greenhouse Gas emissions implemented and regulated by an authorized Governmental Authority) with respect to the Storage Unit(s) and/or Seller, if applicable. Seller shall indemnify, defend and hold Buyer harmless from and against all liabilities, damages, claims, losses, costs and/or expenses (including, without limitation, attorneys' fees) incurred by or brought against Buyer in connection with such Environmental Costs, GHG Charges, AB 32 Compliance Obligation, and other such costs.

ARTICLE SIXTEEN. CHARGING ENERGY MANAGEMENT AND PAYMENTS

16.01. SCE's Charging Energy Management Responsibilities.

Except as set forth in Section 16.03 or as expressly set forth in this Agreement, during the Delivery Period, as SC, SCE shall be responsible for managing, purchasing, scheduling, and transporting all of the Charging Energy Requirements of each Storage Unit to the Energy Delivery Point.

16.02. Seller Charging Energy Responsibilities.

Seller shall take any and all action necessary to deliver the Charging Energy Requirements to the Storage Unit(s) in order to deliver the Product in accordance with the terms of this Agreement, including maintenance, repair or replacement of equipment in Seller's possession or control used to deliver the Charging Energy Requirements to the Storage Unit(s).

16.03. Charging Energy Costs, Charges, and Payments.

In its role as SC with respect to charging the Storage Unit(s), SCE shall be responsible for the electric energy costs associated with providing the Charging Energy Requirements to the Energy Delivery Point ("Charging Energy Costs"); *provided*, that Seller shall be responsible for all costs arising out of or pertaining

to (i) any Energy Adjustment Payment and Energy Efficiency Capacity Reduction Payment, (ii) a Non-SCE Dispatch, and (iii) a Non-SCE Charge.

If SCE pays any electric energy costs which are Seller's responsibility under this Agreement, SCE may deduct the amount of such electric energy costs from any amounts due to Seller pursuant to the terms of this Agreement.

16.04. Charging Notice.

SCE will have the right to charge each Storage Unit, seven days per week and twenty-four (24) hours per day (including holidays), by providing Charging Notices to Seller electronically, and subject to the requirements and limitations set forth in this Agreement. Each Charging Notice will be effective unless and until SCE modifies such Charging Notice by providing Seller with an updated Charging Notice. If an electronic submittal is not possible for reasons beyond SCE's control, SCE may provide Charging Notices by (in order or preference, unless the Parties agree to a different order) electronic mail, facsimile transmission or telephonically to Seller's personnel designated in Appendix 20.05 to receive such communications.

16.05. Non-SCE Charge.

Seller shall not charge any Storage Unit other than pursuant to a Charging Notice, or in connection with a Seller Initiated Test. If Seller (i) charges any Storage Unit to a State of Charge greater than the State of Charge provided for in the Charging Notice, or (ii) charges a Storage Unit without a Charging Notice (each, a "Non-SCE Charge"), then (x) Seller shall be responsible for all energy costs associated with such charging of such Storage Unit(s), (y) such energy shall not be included in the calculation of any Energy Adjustment Payment or Energy Efficiency Capacity Reduction Payment, and (z) SCE shall be entitled to discharge such energy and entitled to all of the benefits associated with such discharge. For purposes of Section 3.02(g), a Non-SCE Charge shall not be considered a permitted charge under this Article Sixteen.

Seller shall be responsible and pay for any CAISO charges, sanction, or penalties associated with a Non-SCE Charge, any failure to charge any Storage Unit(s) consistent with a Charging Notice, and any deviations from a Charging Notice or charging instruction or award from the CAISO.

ARTICLE SEVENTEEN. STORAGE OF ELECTRIC ENERGY

17.01. Storage of Electric Energy.

During the Delivery Period, SCE shall be entitled to all benefits resulting from the stored electric energy, excluding any electric energy used for and during a Non-SCE Dispatch.

17.02. Title, Possession, and Risk of Loss.

During the Delivery Period, SCE shall hold title to, possession of, and risk of loss of the (i) Charging Energy Requirements up to the Energy Delivery Point, and (ii) the Energy from the Product after the Energy Delivery Point.

During the Delivery Period, Seller shall have title to, possession of, and risk of loss of the (x) Charging Energy Requirements at and after the Energy Delivery Point, and (y) Energy from the Product up to and at the Energy Delivery Point.

- (a) Seller Holds Title for SCE's Benefit. Notwithstanding this Section 17.02, during the Delivery Period, Seller shall at all times hold title to the Charging Energy Requirements, excluding electric energy used for a Non-SCE Dispatch, for the benefit of SCE.
- (b) Indemnification. Each Party shall indemnify, defend, and hold harmless the other Party from and against any claims arising from or out of any event, circumstance, act, or incident first occurring or existing during the period when control and title to the Charging Energy Requirements is vested in such Party in accordance with Section 17.02.

ARTICLE EIGHTEEN.

CAISO AND NON-SCE DISPATCHES

18.01. CAISO Dispatch.

Except in order to effectuate a Seller Initiated Test, any award, instruction to charge, or dispatch of any Storage Unit by the CAISO for any reason (whether pursuant to an RMR Contract, must offer obligations, Energy dispatches or otherwise), shall be deemed to be a dispatch or request to charge by SCE for purposes of this Agreement. The Energy dispatched shall be for SCE's benefit hereunder, and SCE shall pay the costs of such CAISO awards, instruction to charge, and dispatches in accordance with the terms of this Agreement as if such dispatches or instruction to charge were directed by SCE. SCE shall be entitled to receive and retain for its own account any and all CAISO revenues for such awards and dispatches, including any availability payments under an RMR Contract for any Storage Unit. Except in order to effectuate a Seller Initiated Test, a dispatch by the CAISO shall not be considered a Non-SCE Dispatch pursuant to this Agreement. CAISO dispatches following any Seller Initiated Test pursuant to Section 7.01 shall not obligate SCE for any associated costs incurred in starting any Storage Unit for, or operation during, such testing period.

18.02. Non-SCE Dispatch.

During the Delivery Period, Seller shall not start-up or discharge any Storage Unit other than (a) pursuant to a Dispatch Notice or (b) pursuant to a Non-SCE

Dispatch. Seller shall, to the extent possible, notify SCE no later than 5:00 a.m. PPT at least two (2) Business Days in advance of the Trading Day of any start-up or discharge pursuant to a Non-SCE Dispatch, and shall, except as otherwise required by Applicable Law, delay such start-up or operation if requested by SCE. Seller shall indemnify, defend, and hold SCE harmless against the costs or losses of SCE resulting from a Non-SCE Dispatch, including all (i) charges, sanctions, and penalties imposed by CAISO, and (ii) the Charging Energy Requirements. Imbalance Energy revenues net of any charges, sanctions, and penalties imposed by CAISO for a Non-SCE Dispatch shall be for Seller's account.

ARTICLE NINETEEN.

SCHEDULING COORDINATOR

19.01. SCE as Scheduling Coordinator.

At least thirty (30) days prior to the beginning of the Delivery Period, Seller shall take all actions and execute and deliver to SCE and the CAISO all documents necessary to authorize or designate SCE as Scheduling Coordinator ("SC") for the Project with the CAISO effective as of the beginning of the Delivery Period. If SCE is not fully authorized as the SC for the Project as of the beginning of the Delivery Period and such delay is:

- (a) due solely to Seller's failure to comply with the terms of this Agreement and the Tariff related to authorizing SCE as SC, then until SCE is fully authorized as the SC for the Project, (i) SCE shall be entitled to the Product but (ii) Seller shall not be entitled to any payment under this Agreement;
- (b) due solely to SCE's failure to comply with the terms of this Agreement and the Tariff related to authorizing SCE as SC, then, until SCE is fully authorized as the SC for the Project, (i) SCE shall not be entitled to the Product; and (ii) the Storage Unit(s) shall be deemed to be available for the amount of the Contract Capacity that is unavailable or undeliverable due to such failure; or
- (c) due to either (i) CAISO failure to perform the actions necessary to authorize SCE as SC, or (ii) the failure of both Parties to comply with the terms of this Agreement and the Tariff with respect to authorizing SCE as SC, then, until SCE is fully authorized as the SC for the Project, (x) SCE shall not be entitled to the Product, and (y) Seller shall not be entitled to any payment under this Agreement.

During the Delivery Period, Seller shall not authorize or designate any other party to act as SC, nor shall Seller perform for its own benefit the duties of SC, and Seller shall not revoke SCE's authorization to act as SC unless agreed to in

writing by SCE. SCE shall submit bids and schedules to the CAISO in accordance with the Tariff and, subject to Article Twenty below, the Operating Restrictions. Seller shall reasonably cooperate with SCE in performing any actions necessary prior to the start of the Delivery Period to allow each Storage Unit to be (i) charged or dispatched (or otherwise scheduled to operate) for the first day of the Delivery Period and (ii) reported to or scheduled with the CAISO pursuant to the Tariff, either through SLIC or as otherwise required by the CAISO, as being in an outage at the commencement of the Delivery Period. All CAISO costs and revenues (including credits and other payments) associated with a dispatch or charge of the Storage Unit(s) on the first day of the Delivery Period that are received by Seller or their SC on the day prior to the Delivery Period shall be for SCE's account.

Furthermore, no later than two (2) weeks prior to the first day of the Delivery Period, Seller shall take all actions necessary with the CAISO and SCE to ensure that by the day immediately prior to the first (1st) day of the Delivery Period, the Master File and, if applicable, the RMR Contract reflect the values that SCE deems appropriate based on the Operating Restrictions under this Agreement. If, at any time prior to the termination of this Agreement, any action or inaction of Seller, or a condition of any Storage Unit that could result in a revision to the Master File or to the operating restrictions set forth in an RMR Contract, then Seller shall promptly give Notice to SCE and shall use all reasonable efforts to maintain the Operating Restrictions exactly as they existed on the Effective Date.

Seller is responsible for and shall pay SCE an "SC Set-Up Fee" equal to the costs (including the costs of SCE employees or agents) SCE incurs, as determined in SCE's sole discretion, as a result of SCE being designated as the Project's Scheduling Coordinator including the costs associated with the registration of the Project with the CAISO, and the installation, configuration, and testing of all equipment and software necessary for SCE to act as Scheduling Coordinator, Schedule the Project, or charge or discharge the Storage Unit(s); *provided*, the SC Set-up Fee shall not exceed fifty thousand dollars (\$50,000.00).

19.02. CAISO Notices.

Subject to Seller complying with its obligations under this Agreement, SCE, as SC, shall submit all notices and updates required under the Tariff regarding each Storage Unit's status to the CAISO. Seller will comply with Article Twenty of this Agreement in providing such notices and updates.

19.03. CAISO Settlements.

As SC, SCE shall be responsible for all settlement functions with the CAISO related to the Project, including, if applicable, as RMR settlement coordinator in accordance with the terms of this Agreement. Seller shall cooperate with SCE in SCE's performance of any settlement functions, and Seller shall promptly deliver

to SCE all Project data and any correspondence or communications with CAISO related to the Project, including any invoices or settlement data, in the format reasonably requested by SCE.

19.04. SDD Charge and SDD Administrative Charge.

Prior to UDP Implementation, (i) if the Qualifying Delivered Energy is not equal to Scheduled Energy in any Settlement Interval, Seller may be subject to a Scheduling and Delivery Deviation Charge ("SDD Charge") or Scheduling and Delivery Deviation Administrative Charge ("SDD Administrative Charge") calculated as set forth in Sections 19.04(a) and 19.04(b) below, and (ii) all CAISO payments and credits resulting from Uninstructed Imbalance Energy shall be for SCE's account.

- (a) Calculation of SDD Charge. Seller shall pay SCE an SDD Charge if during any Settlement Interval the Qualifying Delivered Energy is less than the Performance Tolerance Band Lower Limit for such Settlement Interval. The SDD Charge is calculated as follows:

$$\text{If } A < B, \text{ then SDD Charge} = 0.5 * (B - A) * C$$

where:

A = Qualifying Delivered Energy for the Settlement Interval;

B = Performance Tolerance Band Lower Limit; and

C = SDD Price.

Upon CAISO's implementation of UDP, or any subsequent changes regarding the calculation of UDP, the Parties agree to negotiate in good faith to amend the SDD Charge calculation as necessary to maintain the economic balance of benefits and burdens contemplated under this Section 19.04.

- (b) Calculation of SDD Administrative Charge. Seller shall pay SCE an SDD Administrative Charge if during any Settlement Interval, Delivered Energy (i) exceeds the Performance Tolerance Band Upper Limit or (ii) is less than the Performance Tolerance Band Lower Limit, for such Settlement Interval. The SDD Administrative Charge is calculated as follows:

$$\text{SDD Administrative Charge} = \text{Absolute Value } (E - D) * F$$

where:

D = Delivered Energy for the Settlement Interval;

E = Scheduled Energy for the Settlement Interval; and

F = SDD Admin Price.

19.05. Duties Related to Resource Adequacy Resources.

If a Storage Unit is designated as a Resource Adequacy Resource, the following will apply:

- (a) Seller shall take all actions necessary in order to allow SCE to perform its duties as an SC for a Resource Adequacy Resource, including, but not limited to, (i) providing all information needed for SCE to include the Project on SCE's Supply Plan, and (ii) providing any information requested by SCE related to the Project that is required to be provided to the CAISO or CPUC in order for SCE to comply with the Tariff or other Applicable Laws; and
- (b) SCE shall use the Resource Adequacy Availability Management ("RAAM") software, or any successor application, to allow Seller to utilize the substitution rules found in Section 40.9.4.2.1 of the Tariff ("Substitution Rules"), *provided*, (i) SCE is not required to use or change its utilization of SCE owned or controlled assets or market positions, to allow Seller to utilize the Substitution Rules, (ii) Seller, at its own expense, provides substitute capacity that complies with the Substitution Rules, (iii) Seller provides, as soon as practicable, but no later than 5:00 a.m. PPT the day bids are due in the IFM for the day Seller seeks to substitute capacity for, all information to SCE needed to substitute capacity pursuant to the Substitution Rules, including, but not limited to, the substitution start and end dates, the Resource ID for the substitute unit, a short description of the outage, the outage ID from SLIC application, and the amount of capacity to be substituted, (iv) SCE's duties to take action under this subsection (b) are solely limited to inserting one (1) substitution request through RAAM per day; and (v) Seller causes, and is responsible for, the SC of the storage or generating unit Seller seeks to substitute with to cooperate with SCE in making a substitute request and SCE is not responsible or liable for any costs, damages, penalties, charges, or liabilities ("Substitution Costs") associated with such SC's failure to cooperate or take the proper action; *provided*, further, if the CAISO develops a tool, application, or other means, for Seller to submit its own substitution request, then SCE shall not be required to take any action under this Section 19.05(b) to allow Seller to utilize the Substitution Rules. In no event shall SCE be responsible or liable for any Substitution Costs associated with Seller's inability to utilize the Substitution Rules or rejection by the CAISO of any substitute capacity for any reason, including, but not limited to, any RAAM software limitations or failures,

unless SCE is required to take action and such Substitution Costs or rejection result solely from SCE's actions.

Seller shall provide the information set forth in Section 19.05 through the Outage Management System. If an electronic submittal via the Outage Management System is not available, or is not possible for reasons beyond a Party's control, Seller may provide such information through (in order of preference) electronic mail, facsimile transmission or, if such submissions are not available, then telephonically to the SCE personnel designated to receive such communications as identified in Appendix 20.05 followed by an electronic mail or facsimile transmission of such information as soon as practicable.

SCE may list the Resource Adequacy capacity associated with the Project as Non-Specified RA Replacement Capacity or Specified RA Replacement Capacity.

19.06. Allocation of Charges Related to Generator Replacement Tariff Provisions.

If (a) a Storage Unit is designated as a Resource Adequacy Resource and (b) FERC approves or modifies the Tariff whereby, during periods that a Storage Unit is on a Planned Outage, the SC for a Resource Adequacy Resource is required to (i) replace the Storage Unit with a resource that is not a Resource Adequacy Resource or (ii) face the imposition of a charge, cost, sanction and/or penalty for failing to replace that Storage Unit, then Seller is responsible for (x) replacing the Storage Unit with a resource that is not a Resource Adequacy Resource, and (y) any and all charges, costs, sanctions and/or penalties for failing to replace all or a portion of the Storage Unit. Seller agrees that SCE is not required to take any action, or use or change its utilization of its owned or controlled assets or market positions, to allow Seller to replace the Storage Unit with a resource that is not a Resource Adequacy Resource.

19.07. Terminating SCE's Designation as SC.

At least thirty (30) days prior to the expiration of the Delivery Period, or, in the event of an Early Termination Date being declared, two (2) Business Days prior to the Early Termination Date, the Parties will take all actions necessary to terminate the designation of SCE as SC as of the hour ending 12:00 a.m. PPT on the final date of the Delivery Period ("SC Replacement Date"). Such actions include the following: (a) Seller shall (i) submit to the CAISO a designation of a new SC to replace SCE effective as of the SC Replacement Date, and (ii) cause its newly designated SC to submit a letter to the CAISO accepting the designation; and (b) SCE shall submit a letter to the CAISO resigning as SC effective as of the SC Replacement Date. Seller bears sole responsibility for locating, selecting, and reaching agreement on terms with any replacement SC.

ARTICLE TWENTY.

DISPATCH NOTICES AND OPERATING RESTRICTIONS

20.01. Availability Notice.

For each Operating Day Seller shall provide to SCE using the SCE-provided web-based system (“Outage Management System”) an hourly schedule of the Available Capacity (including Energy and Ancillary Services) that each Storage Unit is expected to have for each hour of such Operating Day, no later than two (2) Business Days before the Trading Day applicable to such Operating Day (the “Availability Notice”). Seller must update SCE immediately using the Outage Management System if the Available Capacity of any Storage Unit changes or is likely to change after the Availability Notice is submitted. Seller must follow up all such updates through the Outage Management System with telephonic updates to SCE’s personnel designated in Appendix 20.05 to receive such communications. Seller shall accommodate SCE’s reasonable requests for changes in the time or form of delivery of the Availability Notices. If an electronic submittal via the Outage Management System is not available, or is not possible for reasons beyond a Party’s control, Seller may provide Availability Notices using the form attached in Appendix 20.01 by (in order of preference unless the Parties agree to a different order) electronic mail, facsimile transmission or, as a last resort, telephonically to SCE’s personnel designated in Appendix 20.05 to receive such communications.

20.02. Dispatch Notices.

SCE will have the right to dispatch each Storage Unit up to PMAX, seven days per week and twenty-four (24) hours per day (including holidays), by providing Dispatch Notices to Seller electronically (in the form attached in Appendix 20.02 or other available form agreeable to SCE), and subject to the requirements and limitations set forth in this Agreement. Subject to Section 20.04, each Dispatch Notice will be effective unless and until SCE modifies such Dispatch Notice by providing Seller with an updated Dispatch Notice. If an electronic submittal is not possible for reasons beyond SCE’s control, SCE may provide Dispatch Notices by (in order or preference, unless the Parties agree to a different order) electronic mail, facsimile transmission or telephonically to Seller’s personnel designated in Appendix 20.05 to receive such communications. In addition to any other requirements set forth in this Agreement, all Dispatch Notices will be made in accordance with market notice timelines as specified in the Tariff.

20.03. Start-Up Notices.

If a Dispatch Notice includes a Start-Up, Seller shall notify SCE electronically when a Storage Unit has initiated a start, and is synchronized and at Minimum Load ready to be dispatched to the required output. Seller shall provide an electronic or facsimile copy of a completed Start-Up Notice, in the form attached

to this Agreement in Appendix 20.03, to SCE within twenty-four (24) hours of the Start-Up. When a Dispatch Notice requires a Start-Up or shutdown, Seller will be responsible for coordinating all required switchyard switching with the Grid Control Center.

20.04. Operating Restrictions.

- (a) Subject to Section 7.04, all Operating Restrictions associated with the Product are specified on Appendix 1.01. In providing a Dispatch Notice or Charging Notice, SCE shall use reasonable efforts to comply with the applicable Operating Restrictions. If SCE submits a Dispatch Notice or Charging Notice that does not conform with the Operating Restrictions, then Seller shall immediately notify SCE of the non-conformity and SCE will modify its Dispatch Notice or Charging Notice to conform to the applicable Operating Restrictions. Until such time as SCE submits a modified Dispatch Notice or Charging Notice, Seller shall, as applicable, deliver the Product in accordance with the Operating Restrictions or charge the Storage Unit(s) in accordance with the Operating Restrictions, and the Storage Unit will not be deemed to be unavailable nor will SDD Administrative Charges, if applicable, be applied for the failure to deliver in accordance with the non-conforming Dispatch Notice or Charging Notice, but only to the extent such Storage Unit was otherwise available but could not be dispatched or charge because of its inability to operate outside of the Operating Restrictions.
- (b) Notwithstanding anything to the contrary in this Agreement, Section 20.04(a), or the Operating Restrictions, if enough energy is stored in the Storage Unit to meet its PMAX, SCE is permitted to issue a Dispatch Notice that dispatches a Storage Unit to its PMAX and SCE is not required to modify any non-conforming Dispatch Notice that dispatches a Storage Unit to its PMAX; *provided*, in instances where the PMAX is greater than the maximum discharge capability set forth in the Operating Restrictions, Seller shall deliver the Product in accordance with the Operating Restrictions, and the Storage Unit will not be deemed to be unavailable nor will SDD Administrative Charges be applied for the failure to dispatch, but only to the extent such Storage Unit was otherwise available but could not be dispatched because of its inability to operate outside of the Operating Restrictions.

20.05. Communication Protocols.

The Parties shall agree to the communication protocols outlined in Appendix 20.05 to facilitate the exchange of information between the Parties.

20.06. Writing Requirements.

In documenting and confirming Dispatch Notices and Charging Notices, conversations between the Parties' personnel and contractors may be recorded by tape or other electronic means and any such recording will satisfy any "writing" requirements under Applicable Laws.

**ARTICLE TWENTY-ONE. METERING, COMMUNICATIONS AND
TELEMETRY**

21.01. SCE Access.

All communication, metering, telemetry, and associated operation equipment will be centralized into the Project's Distributed Control System ("DCS"). Seller shall configure each Storage Unit's DCS so that SCE may access it via the Generation Management System ("GMS") from SCE's Generation Operations Center ("GOC"). Seller shall ensure that the access link will provide a monitoring and control interface to enable automatic control for charging and discharging of each Storage Unit and provide real-time information regarding each Storage Unit(s)' State of Charge to SCE. Seller shall link the systems via an approved SCE communication network, utilizing existing industry standard network protocol, as approved by SCE. The connection will be bidirectional in nature and used by the Parties to exchange all data points to and from the GOC.

21.02. Control Logic.

Seller will ensure that each Storage Unit's DCS control logic will be configured to control the Storage Unit in multiple configurations. Each Storage Unit's control logic will incorporate control signals from multiple locations to perform Energy dispatch, charging, Ancillary Services, and Supplemental Energy functions. Control logic will perform all coordinated megawatt control and Automatic Generation Control ("AGC") independently for each Storage Unit.

21.03. Delivery of Data.

At least thirty (30) days prior to the Expected Initial Delivery Date, Seller shall provide SCE with all facility and metering information necessary to communicate with SCE as may be requested by SCE, including, but not limited to, the information set forth in Appendix 21.03.

21.04. Satellite Communication System.

Seller is responsible for installing, testing, commissioning and maintaining the Satellite Communications System ("SCS") at the Project in accordance with instructions provided by SCE and the SCS vendor. Seller shall grant SCE

reasonable access to the Site for routine calibration and maintenance of the SCS during the Delivery Period.

21.05. SCE Access.

Seller shall take all actions and execute all documents reasonably necessary to grant SCE access to the metering, communications, and telemetry systems specified in this Article Twenty-One.

ARTICLE TWENTY-TWO. OUTAGES

22.01. Planned Outages.

Two (2) years prior to the Expected Initial Delivery Date, and thereafter no later than January 1, April 1, July 1 and October 1 of each calendar year during the Term, Seller shall submit to SCE each Storage Unit's proposed schedule of Planned Outages ("Outage Schedule"), via the Outage Management System, covering every day of the following twenty-four months that is within the Delivery Period. If the Outage Management System is not available, Seller shall submit the Outage Schedule in substantially the form set forth in Appendix 22.01. Within twenty (20) Business Days after its receipt of an Outage Schedule, SCE shall notify Seller in writing of any reasonable request for changes to the Outage Schedule, and Seller shall, if consistent with Prudent Electrical Practices, accommodate SCE's requests regarding the timing of any Planned Outage; *provided* that the CAISO agrees to such changed timing. In the event that SCE's request to change the timing of any Planned Outage would result in Seller incurring incremental costs, or reduction in Monthly Capacity Payments, in excess of what would have been incurred without the Planned Outage timing change requested by SCE, within five (5) Business Days after receipt of SCE's request Seller shall provide reasonable documentation to SCE of the costs and/or revenue impact that would be incurred by Seller and SCE may either agree to reimburse (subject to audit by SCE) Seller for such costs and revenue impact or withdraw its request for such change in Planned Outage timing. Seller shall cooperate with SCE to arrange and coordinate all Outage Schedules with the CAISO in compliance with the Tariff. Seller will communicate to SCE all changes to a Planned Outage and estimated time of return of each Storage Unit as soon as practicable after the condition causing the change becomes known to Seller. Planned Outages that will equal more than one hundred sixty-eight (168) hours in any calendar month, must be agreed to and coordinated in advance between the Parties.

22.02. No Planned Outages During Summer Months.

Unless agreed and coordinated in advance by the Parties, no outages shall be scheduled or planned from each May 1 through September 30 during the Delivery Period. In the event that Seller has a previously Planned Outage that becomes coincident with a CAISO-declared system emergency, Seller shall make all reasonable efforts to reschedule such Planned Outage.

22.03. Notice of Forced Outages.

Seller shall communicate the occurrence of any Forced Outage utilizing SCE's Outage Management System to enter outage information as required by the Tariff, within ten (10) minutes of the commencement of the Forced Outage. Seller shall telephone SCE's Generation Operations Center, within twenty (20) minutes of the Forced Outage, at the telephone number(s) listed in Appendix 20.05. If the CAISO imposes a sanction or penalty upon SCE as Seller's SC due to Seller's failure to timely provide SCE with a report of a Forced Outage or Planned Outage, Seller shall be responsible for such sanction or penalty.

22.04. Reports of Forced Outages or Planned Outages.

Seller shall promptly prepare and provide to SCE, using SCE-provided software or forms, all reports of Forced Outages or Planned Outages that SCE may reasonably require for the purpose of enabling SCE to comply with CAISO requirements or any Applicable Laws.

22.05. Inspection.

In the event of a Forced Outage, SCE shall have the right to inspect any Storage Unit and all records relating thereto on any Business Day and at a reasonable time and Seller shall reasonably cooperate with SCE during any such inspection.

ARTICLE TWENTY-THREE. FORCE MAJEURE

23.01. No Default for Force Majeure.

Subject to Section 8.02(f), neither Party will be considered to be in default in the performance of any of its obligations set forth in this Agreement (except for obligations to pay money) when and to the extent failure of performance is caused by Force Majeure; *provided*, (a) a failure to make payments when due that accrued prior to the Force Majeure event shall not be excused, and (b) there shall be no Available Capacity or A/S Availability for purposes of calculating any Reduced Monthly Capacity Payment even if the unavailability is due to Force Majeure.

23.02. Force Majeure Claim.

Subject to Section 8.02(f), if, because of a Force Majeure, either Party is unable to perform its obligations under this Agreement, such Party shall be excused from whatever performance is affected by the Force Majeure only to the extent so affected; *provided*:

- (a) the Claiming Party, no more than five (5) Business Days after the initial occurrence of the claimed Force Majeure, gives the other Party Notice describing the particulars of the occurrence;
- (b) the Claiming Party, within five (5) Business Days, of providing Notice of occurrence of the Force Majeure, provides evidence reasonably sufficient to establish that the occurrence constitutes a Force Majeure as defined in this Agreement;
- (c) the suspension of performance is of no greater scope and of no longer duration than is required by the Force Majeure; and
- (d) as soon as Claiming Party is able to resume performance of its obligations under this Agreement, it shall do so and shall promptly give the other Party Notice of this resumption.

23.03. Termination.

Either Party may terminate this Agreement on Notice, which will be effective five (5) Business Days after such Notice is provided, if an event of Force Majeure extends for more than three hundred sixty-five (365) consecutive days and materially and adversely affects the operations of the Claiming Party.

ARTICLE TWENTY-FOUR. REPRESENTATIONS, WARRANTIES AND COVENANTS

24.01. Representations and Warranties of Both Parties.

As of the Effective Date and the Approval Date, each Party represents and warrants to the other Party that:

- (a) It is duly organized, validly existing and in good standing under the laws of the jurisdiction of its formation;
- (b) Except as provided in Section 2.02 and Article Five, it has all regulatory authorizations necessary for it to legally perform its obligations under this Agreement;
- (c) The execution, delivery and performance of this Agreement are within its power, have been duly authorized by all necessary action (other than

regulatory approval as set forth in Section 2.02) and do not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any Applicable Laws applicable to it;

- (d) This Agreement constitutes its legally valid and binding obligation enforceable against it in accordance with its terms, subject to any Equitable Defenses;
- (e) It is not Bankrupt and there are not proceedings pending or being contemplated by it or, to its knowledge, threatened against it which could result in it becoming Bankrupt;
- (f) There is not pending or, to its knowledge, threatened against it any legal proceedings that could materially adversely affect its ability to perform its obligations under this Agreement;
- (g) No Event of Default with respect to it has occurred and is continuing and no such Event of Default would occur as a result of its entering into or performing its obligations under this Agreement;
- (h) It is acting for its own account, has made its own independent decision to enter into this Agreement and as to whether this Agreement is appropriate or proper for it based upon its own judgment, is not relying upon the advice or recommendations of the other Party in so doing, and is capable of assessing the merits of and understanding, and understands and accepts, the terms, conditions, and risks of this Agreement;
- (i) It is a “forward contract merchant” within the meaning of the United States Bankruptcy Code; and
- (j) It has entered into this Agreement in connection with the conduct of its business and it has the capacity or ability to make or take delivery of all Product, as applicable, under this Agreement.

24.02. Representations and Warranties of Seller.

Seller represents and warrants to SCE that:

- (a) As of the Approval Date, Seller has Site Control.
- (b) As of the Effective Date and the Approval Date, to the best of Seller’s knowledge, each specification and description of each Storage Unit and the Project and the Product in Article One (and related Appendices) is true and correct.
- (c) As of the Initial Delivery Date, the Project is a New Resource.

Seller's Affirmative Covenants.

- (a) Seller shall maintain and preserve its existence as a *[insert applicable corporate incorporation information]* formed under the laws of the State of *[XX]* and all material rights, privileges and franchises necessary or desirable to enable it to perform its obligations under this Agreement.
- (b) Seller shall, from time to time as requested by SCE, execute, acknowledge, record, register, deliver and/or file all such notices, statements, instruments and other documents as may be necessary or advisable to render fully valid and enforceable under all Applicable Laws the rights, liens and priorities of SCE with respect to its Security Interest furnished pursuant to this Agreement.
- (c) Seller shall ensure that no less than twenty percent (20%) of Seller's aggregate costs to complete the initial development, engineering, procurement and construction of the Project are funded by equity contributions to Seller. The amount funded by equity contributions shall not be less than *[TBD]*. The foregoing shall not impose any obligations that survive the Initial Delivery Date, *provided* that if SCE determines after the Initial Delivery Date that Seller breached this obligation with respect to any time prior to the Initial Delivery Date, SCE retains all rights under this Agreement, including, without limitation under Article Three, with respect to such occurrence.
- (d) Seller shall provide and execute all documents and instruments reasonably necessary (including documents amending this Agreement in ways not materially adverse to Seller and documents reflecting compliance with all applicable Tariff provisions and applicable decisions of the CPUC and/or any other Governmental Authority that address Resource Adequacy performance obligations and penalties hereunder) to effect the use of the Resource Adequacy Benefits of the Project for SCE's sole benefit through the Delivery Period.
- (e) Seller shall obtain, maintain and remain in compliance with all permits, interconnection agreements and transmission rights necessary to operate the Project, charge the Storage Unit(s) and to deliver electric energy from the Project to the Point of Interconnection.
- (f) Seller shall deliver to SCE the Product free and clear of all liens, security interests, claims and encumbrances or any interest therein or thereto by any person.
- (g) Seller shall maintain Site Control throughout and for the remainder of the Term.

- (h) Seller shall, throughout the Term, promptly provide SCE with Notice of any change in any of the specifications or descriptions set forth in Article One (and related Appendices).

24.04. Seller's Negative Covenants.

- (a) Seller shall not issue any Disqualified Stock, other than Disqualified Stock issued in connection with the funding of the development, construction, operation, reconstruction, restoration or refinancing of the Project.
- (b) Except for (i) liens for the benefit of Lender, and (ii) liens cured or removed within thirty (30) days after their incurrence, Seller shall not create, incur, assume or suffer to be created by it or any subcontractor, employee, laborer, materialman, other supplier of goods or services or any other person any lien on Seller's interest in the Site, the Project, or any part thereof or interest therein. Seller shall pay or discharge, or shall cause its contractors to promptly pay and discharge, and discharge of record, any such lien for labor, materials, supplies or other obligations upon Seller's interest in the Site, the Project, or any part thereof or interest therein, unless Seller is disputing any such lien in good faith and only for so long as it does not create an imminent risk of a sale or transfer of the Site, the Project or a material part thereof or interest therein. Seller shall promptly notify SCE of any attachment or imposition of any lien against Seller's interest in the Site, the Project, or any part thereof or interest therein.
- (c) Seller shall not hold any material assets, become liable for any material obligations or engage in any material business activities other than directly associated with the development, construction and operation of the Project.
- (d) Seller shall not own, form or acquire, or otherwise conduct any of its activities through, any direct or indirect subsidiary.
- (e) During any period during which a Seller is a Defaulting Party, Seller shall (i) not declare or pay any dividend, or make any other distribution or payment, on account of any equity interest in Seller, or (ii) otherwise make any distribution or equivalent payment to any Affiliate of Seller.
- (f) Seller shall not directly or indirectly pledge or assign, or cause or permit the pledge or assignment of, the Required Permits as collateral to any party other than to Lender or Lender's agent without SCE's prior written consent, which consent may be granted or withheld in SCE's sole discretion.
- (g) Seller shall not directly or indirectly pledge or assign, or cause or permit the pledge or assignment of, any ownership interest in Seller if such

pledge or assignment would have a material adverse effect on the Project or on Seller's ability to perform its obligations under this Agreement. Seller shall provide SCE with written Notice of any direct or indirect pledge or assignment of any ownership interest in Seller at least ten (10) Business Days prior to such pledge or assignment.

ARTICLE TWENTY-FIVE. LIMITATIONS

25.01. Limitation of Remedies, Liability and Damages.

EXCEPT AS SET FORTH HEREIN, THERE ARE NO WARRANTIES BY EITHER PARTY UNDER THIS AGREEMENT, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ANY AND ALL IMPLIED WARRANTIES ARE DISCLAIMED. THE PARTIES CONFIRM THAT THE EXPRESS REMEDIES AND MEASURES OF DAMAGES PROVIDED IN THIS AGREEMENT SATISFY THE ESSENTIAL PURPOSES HEREOF.

FOR BREACH OF ANY PROVISION FOR WHICH AN EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED, SUCH EXPRESS REMEDY OR MEASURE OF DAMAGES WILL BE THE SOLE AND EXCLUSIVE REMEDY, THE OBLIGOR'S LIABILITY WILL BE LIMITED AS SET FORTH IN SUCH PROVISION AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED, UNLESS THE PROVISION IN QUESTION PROVIDES THAT THE EXPRESS REMEDIES ARE IN ADDITION TO OTHER REMEDIES THAT MAY BE AVAILABLE.

SUBJECT TO SECTION 27.04, IF NO REMEDY OR MEASURE OF DAMAGES IS EXPRESSLY PROVIDED HEREIN, THE OBLIGOR'S LIABILITY WILL BE LIMITED TO DIRECT ACTUAL DAMAGES ONLY, SUCH DIRECT ACTUAL DAMAGES WILL BE THE SOLE AND EXCLUSIVE REMEDY AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED.

UNLESS EXPRESSLY PROVIDED IN THIS AGREEMENT, INCLUDING WITHOUT LIMITATION THE PROVISIONS OF ARTICLE TWENTY-EIGHT (INDEMNITY), NEITHER PARTY WILL BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS OR OTHER BUSINESS INTERRUPTION DAMAGES, BY STATUTE, IN TORT OR CONTRACT, UNDER ANY INDEMNITY PROVISION OR OTHERWISE.

IT IS THE INTENT OF THE PARTIES THAT THE LIMITATIONS HEREIN IMPOSED ON REMEDIES AND THE MEASURE OF DAMAGES BE

WITHOUT REGARD TO THE CAUSE OR CAUSES RELATED THERETO, INCLUDING THE NEGLIGENCE OF ANY PARTY, WHETHER SUCH NEGLIGENCE BE SOLE, JOINT OR CONCURRENT, OR ACTIVE OR PASSIVE.

TO THE EXTENT ANY DAMAGES REQUIRED TO BE PAID HEREUNDER ARE LIQUIDATED, THE PARTIES ACKNOWLEDGE THAT THE DAMAGES ARE DIFFICULT OR IMPOSSIBLE TO DETERMINE, OR OTHERWISE OBTAINING AN ADEQUATE REMEDY IS INCONVENIENT AND THE DAMAGES CALCULATED HEREUNDER CONSTITUTE A REASONABLE APPROXIMATION OF THE HARM OR LOSS.

NOTHING IN THIS ARTICLE PREVENTS, OR IS INTENDED TO PREVENT SCE FROM PROCEEDING AGAINST OR EXERCISING ITS RIGHTS WITH RESPECT TO ANY DELIVERY DATE SECURITY OR PERFORMANCE ASSURANCE.

25.02. No Representation by SCE.

Any review by SCE of the Project, including the design, construction or refurbishment, operation or maintenance of the Project, or otherwise, is solely for SCE's information. By making such review, SCE makes no representation as to the economic and technical feasibility, operational capability, or reliability of the Project, and Seller shall in no way represent to any third party that any such review by SCE of the Project, including, but not limited to, any review of the design, construction or renovation, operation, or maintenance of the Project by SCE, constitutes any such representation by SCE. Seller is solely responsible for the economic and technical feasibility, operational capability, and reliability of the Project.

ARTICLE TWENTY-SIX. RECORDS

26.01. Performance Under this Agreement.

Each Party and its Representatives shall maintain records and supporting documentation relating to this Agreement, the Project, and the performance of the Parties hereunder in accordance with, and for the applicable time periods required by, all Applicable Laws, but in no event less than four (4) years after final payment is made under this Agreement.

26.02. Other Regulatory and Governmental Requirements.

At SCE's request, Seller shall maintain and deliver to SCE copies of records and supporting documentation with respect to the Project that Seller is not already

required to maintain or deliver under this Agreement, in order to comply with all Applicable Laws.

26.03. Audit Rights.

SCE shall have the right, at its sole expense and during normal working hours, to audit the documents, records or data of Seller to the extent reasonably necessary to verify the accuracy of any statement, claim, charge or calculation made pursuant to this Agreement. Seller shall have the right, at its sole expense, to hire an independent third party reasonably acceptable to SCE to audit the documents, records or data of SCE related to this Agreement during normal working hours to the extent reasonably necessary to verify the accuracy of any statement, claim, charge or calculation made pursuant to this Agreement. Such independent third party must sign a confidentiality agreement in substance reasonably acceptable to SCE before examining SCE's documents, records or data. Each Party shall promptly comply with any reasonable request by the other Party under this Section 26.03 and provide copies of documents, records or data to the requesting Party. The rights and obligations under this Section 26.03 shall survive the termination of this Agreement for a period of two (2) years.

26.04. California Climate Action Registry.

If applicable, in accordance with CPUC Rulemaking 06-04-009, upon modification of the protocols of the California Climate Action Registry to allow energy storage (as applicable) facility-specific registration, Seller shall promptly (i) register with the California Climate Action Registry, (ii) send SCE Notice of such registration and (iii) remain a member of the California Climate Action Registry throughout the entire Term.

ARTICLE TWENTY-SEVEN. DISPUTES

27.01. Dispute Resolution.

Other than requests for provisional relief under Section 27.04, any and all Disputes which the Parties have been unable to resolve by informal methods after undertaking a good faith effort to do so, must first be submitted to mediation under the procedures described in Section 27.02 below, and if the matter is not resolved through mediation, then for final and binding arbitration under the procedures described in Section 27.03 below.

The Parties waive any right to a jury and agree that there will be no interlocutory appellate relief (such as writs) available. Any Dispute resolution process pursuant to this Article Twenty-Seven shall be commenced within one (1) year of the date of the occurrence of the facts giving rise to the Dispute, without regard to the date such facts are discovered; *provided*, if the facts giving rise to the Dispute were not

reasonably capable of being discovered at the time of their occurrence, then such one (1) year period shall commence on the earliest date that such facts were reasonably capable of being discovered. If the Dispute resolution process pursuant to Article Twenty-Seven with respect to a Dispute is not commenced within such one (1) year time period, such Dispute shall be barred, without regard to any other limitations period set forth by law or statute.

27.02. Mediation.

Either Party may initiate mediation by providing Notice to the other Party in accordance with Section 30.02 of a written request for mediation, setting forth a description of the Dispute and the relief requested.

The Parties will cooperate with one another in selecting the mediator (“Mediator”) from the panel of neutrals from Judicial Arbitration and Mediation Services, Inc. (“JAMS”), its successor, or any other mutually acceptable non-JAMS Mediator, and in scheduling the time and place of the mediation.

Such selection and scheduling will be completed within forty-five (45) days after Notice of the request for mediation.

Unless otherwise agreed to by the Parties, the mediation will not be scheduled for a date that is greater than one hundred twenty (120) days from the date of Notice of the request for mediation.

The Parties covenant that they will participate in the mediation in good faith, and that they will share equally in its costs (other than each Party’s individual attorneys’ fees and costs related to the Party’s participation in the mediation, which fees and costs will be borne by such Party).

All offers, promises, conduct and statements, whether oral or written, made in connection with or during the mediation by either of the Parties, their agents, representatives, employees, experts and attorneys, and by the Mediator or any of the Mediator’s agents, representatives and employees, will not be subject to discovery and will be confidential, privileged and inadmissible for any purpose, including impeachment, in any arbitration or other proceeding between or involving the Parties, or either of them, *provided*, evidence that is otherwise admissible or discoverable will not be rendered inadmissible or non-discoverable as a result of its use in the mediation.

27.03. Arbitration.

Either Party may initiate binding arbitration with respect to the matters first submitted to mediation by providing Notice in accordance with Section 30.02 of a demand for binding arbitration before a single, neutral arbitrator (the “Arbitrator”) within sixty (60) days following the unsuccessful conclusion of the mediation provided for in Section 27.02, above. If Notice of arbitration is not provided by

either Party within sixty (60) days following the unsuccessful conclusion of the mediation provided for in Section 27.02 above, the Dispute resolution process shall be deemed complete and further resolution of such Dispute shall be barred, without regard to any other limitations period set forth by law or statute.

The Parties will cooperate with one another in selecting the Arbitrator within sixty (60) days after Notice of the demand for arbitration and will further cooperate in scheduling the arbitration to commence no later than one hundred eighty (180) days from the date of Notice of the demand.

If, notwithstanding their good faith efforts, the Parties are unable to agree upon a mutually-acceptable Arbitrator, the Arbitrator will be appointed as provided for in California Code of Civil Procedure Section 1281.6.

To be qualified as an Arbitrator, each candidate must be a retired judge of a trial court of any state or federal court, or retired justice of any appellate or supreme court.

Unless otherwise agreed to by the Parties, the individual acting as the Mediator will be disqualified from serving as the Arbitrator in the Dispute, although the Arbitrator may be another member of the JAMS panel of neutrals or such other panel of neutrals from which the Parties have agreed to select the Mediator.

Upon Notice of a Party's demand for binding arbitration, such Dispute submitted to arbitration, including the determination of the scope or applicability of this agreement to arbitrate, will be determined by binding arbitration before the Arbitrator, in accordance with the laws of the State of California, without regard to principles of conflicts of laws.

Except as provided for herein, the arbitration will be conducted by the Arbitrator in accordance with the rules and procedures for arbitration of complex business disputes for the organization with which the Arbitrator is associated.

Absent the existence of such rules and procedures, the arbitration will be conducted in accordance with the California Arbitration Act, California Code of Civil Procedure Section 1280 *et seq.* and California procedural law (including the Code of Civil Procedure, Civil Code, Evidence Code and Rules of Court, but excluding local rules).

Notwithstanding the rules and procedures that would otherwise apply to the arbitration, and unless the Parties agree to a different arrangement, the place of the arbitration will be in Los Angeles County, California.

Also notwithstanding the rules and procedures that would otherwise apply to the arbitration, and unless the Parties agree to a different arrangement, discovery will be limited as follows:

- (a) Before discovery commences, the Parties shall exchange an initial disclosure of all documents and percipient witnesses which they intend to rely upon or use at any arbitration proceeding (except for documents and witnesses to be used solely for impeachment);
- (b) The initial disclosure will occur within thirty (30) days after the initial conference with the Arbitrator or at such time as the Arbitrator may order;
- (c) Discovery may commence at any time after the Parties' initial disclosure;
- (d) The Parties will not be permitted to propound any interrogatories or requests for admissions;
- (e) Discovery will be limited to twenty-five (25) document requests (with no subparts), three (3) lay witness depositions, and three (3) expert witness depositions (unless the Arbitrator holds otherwise following a showing by the Party seeking the additional documents or depositions that the documents or depositions are critical for a fair resolution of the Dispute or that a Party has improperly withheld documents);
- (f) Each Party is allowed a maximum of three (3) expert witnesses, excluding rebuttal experts;
- (g) Within sixty (60) days after the initial disclosure, or at such other time as the Arbitrator may order, the Parties shall exchange a list of all experts upon which they intend to rely at the arbitration proceeding;
- (h) Within thirty (30) days after the initial expert disclosure, the Parties may designate a maximum of two (2) rebuttal experts;
- (i) Unless the Parties agree otherwise, all direct testimony will be in form of affidavits or declarations under penalty of perjury; and
- (j) Each Party shall make available for cross examination at the arbitration hearing its witnesses whose direct testimony has been so submitted.

Subject to Article Twenty-Five, the Arbitrator will have the authority to grant any form of equitable or legal relief a Party might recover in a court action. Judgment on the award may be entered in any court having jurisdiction.

The Parties acknowledge and agree that irreparable damage would occur if certain provisions of this Agreement are not performed in accordance with the terms of the Agreement, that money damages would not be a sufficient remedy for any breach of these provisions of this Agreement, and that the Parties shall be entitled, without the requirement of posting a bond or other security, to specific performance and injunctive or other equitable relief as a remedy for a breach of

Sections 1.01, 3.06, 19.05, and 24.02(a) and Article Twenty-Nine of this Agreement.

The Arbitrator must, in any award, allocate all of the costs of the binding arbitration (other than each Party's individual attorneys' fees and costs related to the Party's participation in the arbitration, which fees and costs will be borne by such Party), including the fees of the Arbitrator and any expert witnesses, against the Party who did not prevail.

Until such award is made, however, the Parties will share equally in paying the costs of the arbitration.

At the conclusion of the arbitration hearing, the Arbitrator shall prepare in writing and provide to each Party a decision setting forth factual findings, legal analysis, and the reasons on which the Arbitrator's decision is based. The Arbitrator shall also have the authority to resolve claims or issues in advance of the arbitration hearing that would be appropriate for a California superior court judge to resolve in advance of trial. The Arbitrator shall not have the power to commit errors of law or fact, or to commit any abuse of discretion, that would constitute reversible error had the decision been rendered by a California superior court. The Arbitrator's decision may be vacated or corrected on appeal to a California court of competent jurisdiction for such error. Unless otherwise agreed to by the Parties, all proceedings before the Arbitrator shall be reported and transcribed by a certified court reporter, with each Party bearing one-half of the court reporter's fees.

27.04. Provisional Relief.

The Parties acknowledge and agree that irreparable damage would occur if certain provisions of this Agreement are not performed in accordance with the terms of this Agreement, that money damages would not be a sufficient remedy for any breach of these provisions of this Agreement, and that the Parties shall be entitled, without the requirement of posting a bond or other security, to seek a preliminary injunction, temporary restraining order, or other provisional relief as a remedy for a breach of Section 1.01, 3.06, 19.05, or 24.02(a) or Article Twenty-Nine of this Agreement in any court of competent jurisdiction, notwithstanding the obligation to submit all other Disputes (including all claims for monetary damages under this Agreement) to arbitration pursuant to Section 27.01. The Parties further acknowledge and agree that the results of the arbitration may be rendered ineffectual without the provisional relief.

Such a request for provisional relief does not waive a Party's right to seek other remedies for the breach of the provisions specified above in accordance with Section 27.01, notwithstanding any prohibition against claim-splitting or other similar doctrine. The other remedies that may be sought include specific performance and injunctive or other equitable relief, plus any other remedy

specified in this Agreement for the breach of the provision, or if the Agreement does not specify a remedy for the breach, all other remedies available at law or equity to the Parties for the breach.

27.05. WAIVER OF JURY TRIAL.

THE PARTIES WAIVE ANY RIGHT TO TRIAL BY JURY IN ANY LITIGATION ARISING UNDER THIS AGREEMENT.

27.06. Consolidation of Matters.

The Parties shall make diligent good faith efforts to consolidate any provisional relief, mediation, arbitration or other dispute resolution proceedings arising pursuant to this Article Twenty-Seven that arise from or relate to the same act, omission or issue.

ARTICLE TWENTY-EIGHT. INDEMNIFICATION

28.01. SCE's Indemnification Obligations.

In addition to any other indemnification obligations SCE may have elsewhere in this Agreement, which are hereby incorporated in this Section 28.01, SCE releases, and shall indemnify, defend and hold harmless Seller, and Seller's directors, officers, employees, agents, assigns, and successors in interest, from and against any and all loss, liability, damage, claim, cost, charge, demand, fine, penalty or expense of any kind or nature (including any direct, damage, claim, cost, charge, demand, or expense, and attorneys' fees (including cost of in-house counsel) and other costs of litigation, arbitration and mediation, and in the case of third-party claims only, indirect and consequential loss or damage of such third-party), arising out of or in connection with any breach made by SCE of its representations and warranties in Section 24.01.

This indemnity applies notwithstanding Seller's active or passive negligence. However, Seller will not be indemnified hereunder for its loss, liability, damage, claim, cost, charge, demand or expense to the extent caused by its gross negligence or willful misconduct.

28.02. Seller's Indemnification Obligations.

In addition to any other indemnification obligations Seller may have elsewhere in this Agreement, which are hereby incorporated in this Section 28.02, Seller releases, and shall indemnify, defend and hold harmless SCE, and SCE's directors, officers, employees, agents, assigns, and successors in interest, from and against any and all loss, liability, damage, claim, cost, charge, demand, penalty, fine or expense of any kind or nature (including any direct, damage,

claim, cost, charge, demand, or expense, and attorneys' fees (including cost of in-house counsel) and other costs of litigation, arbitration or mediation, and in the case of third-party claims only, indirect or consequential loss or damage of such third-party), arising out of or in connection with:

- (a) any breach made by Seller of its representations and warranties in Sections 24.01 and 24.02;
- (b) Seller's failure to fulfill its obligations regarding Resource Adequacy Benefits as set forth in Sections 1.01(d) and 19.05;
- (c) Penalties assessed by FERC, NERC (through WECC or otherwise) or other Governmental Authority for violations of the NERC Reliability Standards by the Project or Seller, as Generator Operator or other applicable category against SCE, except to the extent solely due to SCE's negligence in performing its role as Seller's Scheduling Coordinator throughout the Delivery Period;
- (d) injury or death to persons, including SCE employees, and physical damage to property, including SCE property, where the damage arises out of, is related to, or is in connection with, Seller's construction, ownership or operation of the Project, or obligations or performance under this Agreement;
- (e) injury or death to any person or damage to any property, including the personnel or property of SCE, to the extent that SCE would have been protected had Seller complied with all of the provisions of Section 30.15; *provided*, the inclusion of this subsection (e) is not intended to create any express or implied right in Seller to elect not to provide the insurance required under Section 30.15;
- (f) any breach by Seller of the covenants set forth in Sections 24.03, and 24.04;
- (g) the Storage Unit(s), or any equipment, software, applications or programs (or any portion of same) used in connection with the Storage Unit(s) or the Project result in an infringement upon or violation of any trade secret, trademark, trade name, copyright, patent, or other intellectual property rights of any third party;
- (h) any material violation of any Applicable Law by Seller or its subcontractors; or
- (i) any (i) release of a Hazardous Material by Seller its EPC Contractor or any of Seller's or its EPC Contractor's subcontractors, (ii) enforcement or compliance proceeding relating to or in connection with any alleged, threatened or actual violation of any environmental law by Seller or its

EPC Contractor or any of Seller's or its EPC Contractor's subcontractors, or (iii) action reasonably necessary to abate, investigate, remediate or prevent a violation or threatened violation of any environmental law by Seller or its EPC Contractor or any of Seller's or its EPC Contractor's subcontractors.

This indemnity applies notwithstanding SCE's active or passive negligence. However, SCE will not be indemnified under Section 28.02(a) - (d) for its loss, liability, damage, claim, cost, charge, demand or expense to the extent caused by its gross negligence or willful misconduct.

28.03. Indemnification Claims.

All claims for indemnification by a Party entitled to be indemnified under this Agreement (an "Indemnified Party") by the other Party (the "Indemnitor") will be asserted and resolved as follows:

- (a) If a claim or demand for which an Indemnified Party may claim indemnity is asserted against or sought to be collected from an Indemnified Party by a third party, the Indemnified Party shall as promptly as practicable give Notice to the Indemnitor; *provided*, failure to provide this Notice will relieve Indemnitor only to the extent that the failure actually prejudices Indemnitor.
- (b) Indemnitor will have the right to control the defense and settlement of any claims in a manner not adverse to Indemnified Party but cannot admit any liability or enter into any settlement without Indemnified Party's approval.
- (c) Indemnified Party may employ counsel at its own expense with respect to any claims or demands asserted or sought to be collected against it; *provided*, if counsel is employed due to a conflict of interest or because Indemnitor does not assume control of the defense, Indemnitor will bear the expense of this counsel.

28.04. Resource Adequacy.

Seller agrees to indemnify SCE for any monetary penalties or fines assessed against SCE by the CPUC or the CAISO or any other entity having jurisdiction, resulting from Seller's willful or negligent failure to provide SCE with the full Contract Capacity for the Project for purposes of meeting SCE's RA Compliance Obligations. The Parties shall use commercially reasonable efforts to minimize such fines and penalties; *provided*, in no event will SCE be required to use or change its utilization of its owned or controlled assets or market positions to minimize the fines and penalties.

28.05. NERC Standards Compliance Penalties.

During the Delivery Period, Seller shall be (i) responsible for complying with any NERC Reliability Standards applicable to the Storage Units, including registration with NERC as the Generator Operator for the Storage Units or other applicable category under the NERC Reliability Standards and implementation of all applicable processes and procedures required by FERC, NERC, WECC, CAISO or other Governmental Authority for compliance with the NERC Reliability Standards; and (ii) liable for all penalties assessed by FERC, NERC (through WECC or otherwise) or other Governmental Authority for violations of the NERC Reliability Standards by the Project or Seller, as Generator Operator or other applicable category. However, if Seller learns that FERC, NERC (through WECC or otherwise) or other Governmental Authority is considering or intends to assess Seller with a penalty that Seller believes is attributable to SCE's actions or inactions as SC as described in the document entitled "NERC Reliability Standards - Responsibilities of the Generator Operator, Scheduling Coordinator, CAISO, and Reliability Coordinator" or other successor description or document on the CAISO website at the time of the potential assessment, Seller shall provide SCE with sufficient notice to allow SCE to take part in administrative processes, discussions or settlement negotiations with FERC, NERC, WECC, or other Governmental Authority arising from or related to the alleged violation or possible penalty. If the penalty is nonetheless assessed in spite of SCE's participation in the processes, discussions or settlement negotiations, or SCE waives its right to take part in the processes, discussion or settlement negotiations with FERC, NERC, WECC, or other Governmental Authority, SCE shall reimburse Seller for the penalty to the extent that (a) it was solely caused by SCE's actions or inactions as SC as described in the document entitled "NERC Reliability Standards - Responsibilities of the Generator Operator, Scheduling Coordinator, CAISO, and Reliability Coordinator" or other successor description or document on the CAISO website at the time of the violation; and (b) Seller can establish to SCE's reasonable satisfaction that the penalty was actually assessed against Seller by FERC, NERC (through WECC or otherwise) or other Governmental Authority and paid by Seller to the applicable entity. If SCE took part in and agreed to the terms of settlement, SCE shall also reimburse Seller for any payment made by Seller in settlement of a claim of violation by or on behalf of FERC, NERC (through WECC or otherwise) or other Governmental Authority, to the extent that (x) the claim being settled was solely caused by SCE's actions or inactions as SC as described in the document entitled "NERC Reliability Standards - Responsibilities of the Generator Operator, Scheduling Coordinator, CAISO, and Reliability Coordinator" or other successor description or document on the CAISO website at the time of the claim; and (y) Seller can establish to SCE's reasonable satisfaction that Seller actually made the payment to the applicable entity under the settlement.

28.06. Survival.

All indemnity rights shall survive the termination of this Agreement.

ARTICLE TWENTY-NINE. CONFIDENTIALITY/REGULATORY DISCLOSURE

29.01. Confidentiality Obligation.

Except as otherwise expressly agreed in writing by the other Party, and except as otherwise agreed in Sections 29.02 and 29.03, each receiving Party shall, and shall cause its Representatives to, (a) keep strictly confidential and take reasonable precautions to protect against the disclosure of all Confidential Information, and (b) use all Confidential Information solely for the purposes of performing its obligations under this Agreement and not for any other purpose; *provided*, a Party may disclose Confidential Information to those of its Representatives who need to know such information for the purposes of performing the receiving Party's obligations under this Agreement if, but only if, prior to being given access to Confidential Information, such Representatives are informed of the confidentiality thereof and the requirements of this Agreement and are directed to comply with the requirements of this Agreement and, in the case of Representatives of Seller engaged wholly or in part in the purchase and sale of electrical power or natural gas, only if such Representatives are *directly* engaged in performing Seller's obligations under this Agreement. Each Party will be responsible for any breach of this Agreement by its Representatives.

29.02. Permitted Disclosures.

- (a) SCE may disclose Confidential Information to the Independent Evaluator. SCE and the Independent Evaluator may disclose Confidential Information to duly authorized regulatory and governmental agencies or entities, including the FERC, CPUC and all divisions thereof, and the CAISO, SCE's Procurement Review Group (the "PRG"), a group of non-market participants including members of the CPUC, and SCE's Cost Allocation Mechanism Group ("CAM"), and other governmental agencies and consumer groups established by the CPUC in Decision 02-08-071. Neither SCE nor the Independent Evaluator shall have any liability whatsoever to Seller in the event of any unauthorized use or disclosure by a regulatory or governmental agency or entity including without limitation the FERC, the CPUC and all divisions thereof, the PRG, CAM or the CAISO of any Confidential Information or other information disclosed to any of them by SCE or the Independent Evaluator.
- (b) SCE and the Independent Evaluator may also disclose Confidential Information to any Governmental Authority or to any third party to the

extent necessary to comply with any Applicable Laws, and any applicable regulation, decision, rule, subpoena or order of the CPUC, CEC, FERC, any administrative agency, legislative body or other tribunal (other than those entities set forth in Section 29.02(c), any exchange, Control Area or CAISO rule, or any discovery or data request of a party to any proceeding pending before any of the foregoing.

- (c) The Parties may disclose Confidential Information to the extent necessary to comply with any subpoena or order of court or judicial entity having jurisdiction over the disclosing Party (other than those entities set forth in Section 29.02(b)), or in connection with a discovery or data request of a party to any proceeding before any of the foregoing.
- (d) SCE and the Independent Evaluator may disclose Confidential Information to third parties who are participants, including potential bidders, in any transaction permitted pursuant to Section 30.17; *provided* that, prior to being given access to Confidential Information, such third parties shall be informed of the confidentiality thereof and shall sign a confidentiality agreement with respect to such information which such agreement shall have confidentiality terms similar to this Agreement.

29.03. Duty to Seek Protection.

- (a) In connection with requests or orders to produce Confidential Information protected by this Agreement in the circumstances provided in Section 29.02(c) (by deposition, interrogatories, requests for information or documents, subpoena, order or similar legal process) each Party (i) will promptly notify the other Party of the existence, terms, and circumstances of such requirement(s) so that such other Party may seek an appropriate protective order or waive compliance with the provisions of this Agreement, and (ii) will, and will cause its Representatives to, cooperate fully with such other Party in seeking to limit or prevent such disclosure of such Confidential Information.
- (b) If a Party or its Representatives are, in the written opinion of its legal counsel, and notwithstanding compliance with Section 29.03(a) compelled to make disclosure in response to a requirement described in Section 29.03(a) or stand liable for contempt or suffer other penalty, the compelled person may disclose only that portion of the Confidential Information protected by this Agreement which it is legally required to disclose and will exercise its best efforts to obtain reliable assurance that confidential treatment will be accorded to the disclosed Confidential Information protected by this Agreement.

29.04. Ownership and Return of Information.

All Confidential Information shall be and remain the property of the Party providing it. Nothing in this Agreement shall be construed as granting any rights in or to Confidential Information to the Party or Representatives receiving it, except the right of use in accordance with the terms of this Agreement. Notwithstanding the foregoing, the Parties shall have the right to retain copies of Confidential Information, subject to the confidentiality obligations in this Article Twenty-Nine.

ARTICLE THIRTY.

MISCELLANEOUS

30.01. General.

This Agreement shall be considered for all purposes as prepared through the joint efforts of the Parties and shall not be construed against one Party or the other as a result of the preparation, substitution, submission or other event of negotiation, drafting or execution hereof. The term “including” when used in this Agreement shall be by way of example only and shall not be considered in any way to be in limitation. All references to time shall be in PPT unless stated otherwise. The headings used herein are for convenience and reference purposes only. This Agreement shall be binding on each Party’s successors and permitted assigns. Each Party agrees if one Party seeks to amend any applicable wholesale power sales tariff during the term of this Agreement without the prior written consent of the other Party, such amendment will not in any way affect either Party’s obligations under the Agreement. Each Party further agrees that it will not assert, or defend itself, on the basis that any applicable tariff is inconsistent with this Agreement.

30.02. Notices.

Unless otherwise provided in this Agreement, any notice or request (“Notice”) shall be in writing to the address provided below and delivered by hand delivery, United States mail, overnight courier service, or facsimile. Notice by facsimile or hand delivery shall be effective at the close of business on the day received, if the entire document was received during business hours on a Business Day, and otherwise shall be effective at the close of business on the next Business Day after it was sent or personally delivered. Notice by overnight courier service shall be effective on the next Business Day after the postmarked date. Notice by United States mail shall be effective on the third (3rd) Business Day after it was sent. A Party may change its address by providing Notice of same to the other Party in accordance with this Section 30.02.

If to SCE:

Southern California Edison Company

2244 Walnut Grove Avenue
Rosemead, California 91770
Attn: Vice President, Energy Contracts
Facsimile No.: (626) 302-3254

Copy: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770
Attn: Director and Managing Attorney, Power
Procurement
Facsimile No.: (626) 302-1935

If to Seller: *[Seller]*
Address
Address Line 2
City, State Zip
Attn:
Facsimile No.:

Copy: *[Seller]*
Address Line 1
Address Line 2
City, State Zip
Attn:
Facsimile No.:

30.03. Governing Law; Venue.

THIS AGREEMENT SHALL BE CONSTRUED UNDER THE LAWS OF THE STATE OF CALIFORNIA WITHOUT GIVING EFFECT TO CHOICE OF LAW PROVISIONS THAT MIGHT APPLY THE LAWS OF A DIFFERENT JURISDICTION. THE PARTIES HEREBY CONSENT TO CONDUCT ALL DISPUTE RESOLUTION, JUDICIAL ACTIONS OR PROCEEDINGS ARISING DIRECTLY, INDIRECTLY OR OTHERWISE IN CONJUNCTION WITH, OUT OF, RELATED TO OR ARISING FROM THIS AGREEMENT IN THE COUNTY OF LOS ANGELES, CALIFORNIA.

30.04. Amendment.

This Agreement can only be amended by a writing signed by both Parties.

30.05. Assignment.

Neither Party shall assign, transfer, delegate, mortgage, hypothecate, pledge or encumber its rights, title or interest in this Agreement without the prior written consent of the other Party, which consent may be withheld in the exercise of its sole discretion; *provided*, (i) Seller may collaterally assign this Agreement in accordance with Article Fourteen; and (ii) SCE shall be permitted to assign its rights under this Agreement, without Seller's consent, in connection with any transactions permitted by Section 30.17.

30.06. Waiver.

None of the provisions of this Agreement shall be considered waived by either Party unless the Party against whom such waiver is claimed gives the waiver in writing. The failure of either Party to insist in any one instance upon strict performance of any the provisions of this Agreement or to take advantage of any of its rights hereunder shall not be construed as a waiver of any such provisions or the relinquishment of such rights for the future, but the same shall continue and remain in full force and effect. Waiver by either Party of any default of the other Party shall not be deemed a waiver of any other default.

30.07. Obligations Surviving Termination.

Except as may be provided or limited by this Agreement, the obligations which by their nature are intended to survive termination of this Agreement, including representations, warranties, covenants and rights and obligations with respect to audits, indemnification, payment and settlement, confidentiality, remedies, limitation of liabilities, posting of Performance Assurance and Delivery Date Security, dispute resolution, and limitations on third party sales, shall so survive.

30.08. Further Assurances.

If either Party determines in its reasonable discretion that any further instruments, assurances or other things are necessary to carry out the terms of this Agreement, the other Party shall execute and deliver all such instruments and assurances and do all things reasonably necessary to carry out the terms of this Agreement.

30.09. No Agency.

Except as otherwise provided explicitly herein, in performing their respective obligations under this Agreement, neither Party is acting, or is authorized to act, as the other Party's agent.

30.10. No Third Party Beneficiaries.

This Agreement shall not impart any rights enforceable by any third party (other than a permitted successor or assignee bound by this Agreement or any third party

which acquires rights under this Agreement or with respect to any Product pursuant to Section 30.17 below).

30.11. Independent Contractors.

The Parties are independent contractors. Nothing contained herein shall be deemed to create an association, joint venture, partnership or principal/agent relationship between the Parties or to impose any partnership obligation or liability on either Party in anyway.

30.12. Severability.

If any term, Section, provision or other part of this Agreement, or the application of any term, Section, provision or other part of this Agreement, is held to be invalid, illegal or void by a court or regulatory agency of proper jurisdiction, all other terms, Sections, provisions or other parts of this Agreement shall not be affected thereby but shall remain in force and effect unless a court or regulatory agency holds that the provisions are not separable from all other provisions of this Agreement.

30.13. Forward Contract.

The Parties acknowledge and agree that this Agreement constitutes a “forward contract” and that they are each “forward contract merchants” within the meaning of the United States Bankruptcy Code.

30.14. Mobile Sierra.

Absent the agreement of all Parties to the proposed change, the standard of review for changes to any rate, charge, classification, term or condition of this Agreement, whether proposed by a Party (to the extent that any waiver below is unenforceable or ineffective as to such Party), a non-party or FERC acting *sua sponte*, shall be the ‘public interest’ standard of review set forth in *United Gas Pipe Line Co. v. Mobile Gas Service Corp.*, 350 U.S. 332 (1956) and *Federal Power Commission v. Sierra Pacific Power Co.*, 350 U.S. 348 (1956) , and clarified by *Morgan Stanley Capital Group, Inc. v. Public Util. Dist. No. 1 of Snohomish* 554 U.S. 527 (2008).

Notwithstanding any provision of Agreement, and absent the prior written agreement of the Parties, each Party, to the fullest extent permitted by Applicable Laws, for itself and its respective successors and assigns, hereby also expressly and irrevocably waives any rights it can or may have, now or in the future, whether under Sections 205, 206, or 306 of the Federal Power Act or otherwise, to seek to obtain from FERC by any means, directly or indirectly (through complaint, investigation, supporting a third party seeking to obtain or otherwise), and each hereby covenants and agrees not at any time to seek to so obtain, an

order from FERC changing any Section of this Agreement specifying any rate or other material economic terms and conditions agreed to by the Parties.

30.15. Insurance Requirements.

Throughout the Term and for such additional periods as may be specified below, Seller shall, at its own expense, provide and maintain in effect the insurance policies and minimum limits of coverage specified below, and such additional coverage as may be required by Applicable Law, with insurance companies which are authorized to do business in the state in which the services are to be performed and which have an A.M. Best's Insurance Rating of not less than A-:VII. The minimum insurance requirements specified herein do not in any way limit or relieve Seller of any obligation assumed elsewhere in this Agreement, including, but not limited to, Seller's defense and indemnity obligations.

- (a) Workers' Compensation Insurance with the statutory limits required by the state having jurisdiction over Seller's employees;
- (b) Employer's Liability Insurance with limits of not less than:
 - (i) Bodily injury by accident – One Million dollars (\$1,000,000) each accident
 - (ii) Bodily injury by disease – One Million dollars (\$1,000,000) policy limit
 - (iii) Bodily injury by disease – One Million dollars (\$1,000,000) each employee
- (c) Commercial General Liability Insurance (which, except with the prior written consent of SCE and subject to Sections 30.15(c)(i) and (ii) below, shall be written on an "occurrence," not a "claims-made" basis), covering all operations by or on behalf of Seller arising out of or connected with this Agreement, including coverage for bodily injury, broad form property damage, personal and advertising injury, products/completed operations, and contractual liability. Such insurance shall bear a combined single limit per occurrence and annual aggregate of not less than [TBD (or) \$1,000,000, per occurrence and \$2,000,000 annual aggregate], exclusive of defense costs, for all coverages. Such insurance shall contain standard cross-liability and severability of interest provisions and no explosion, collapse, or underground exclusions.

If Seller elects, with SCE's written concurrence, to use a "claims made" form of Commercial General Liability Insurance, then the following additional requirements apply:

- (i) The retroactive date of the policy must be prior to the Effective Date; and
 - (ii) Either the coverage must be maintained for a period of not less than three (3) years after the Agreement terminates, or the policy must provide for a supplemental extended reporting period of not less than three (3) years after this Agreement terminates.
- (d) Commercial Automobile Liability Insurance covering bodily injury and property damage with a combined single limit of not less than One Million dollars (\$1,000,000) per occurrence. Such insurance shall cover liability arising out of Seller's use of all owned (if any), non-owned and hired automobiles in the performance of the Agreement.
- (e) Pollution Liability Insurance, (which, except with the prior written consent of SCE and subject to Sections 30.15(e)(i) and (ii) below, shall be written on an "occurrence," not a "claims-made" basis) with limits of not less than *[TBD (or) \$5,000,000, per occurrence or each claim and in the annual aggregate]*, covering losses involving hazardous material(s) and caused by pollution incidents or conditions that arise from the Project, including but not limited to, coverage for bodily injury, sickness, disease, mental anguish or shock sustained by any person, including death, property damage including the resulting loss of use thereof, clean-up costs, and the loss of use of tangible property that has not been physically damaged or destroyed, and defense costs.

If Seller elects, with SCE's written concurrence, to use a "claims made" form of Pollution Liability Insurance, then the following additional requirements apply:

- (i) The retroactive date of the policy must be prior to the Effective Date; and
 - (ii) Either the coverage must be maintained for a period of not less than three (3) years after this Agreement terminates, or the policy must provide for a supplemental extended reporting period of not less than three (3) years after this Agreement terminates.
- (f) Umbrella/Excess Liability Insurance, written on an "occurrence," not a "claims-made" basis, providing coverage excess of the underlying Employer's Liability, Commercial General Liability, Pollution Liability Insurance, and Commercial Automobile Liability insurance, on terms at least as broad as the underlying coverage, with limits of not less than *[TBD (or) \$10,000,000, per occurrence and in the annual aggregate]* per occurrence and in the annual aggregate. The insurance requirements of

this Section 30.15 can be provided by any combination of Seller's primary and excess liability policies.

- (g) SCE as Insured. The insurance required in Section 30.15 shall apply as primary insurance to, without a right of contribution from, any other insurance maintained by or afforded to SCE, its subsidiaries and affiliates, and their respective officers, directors, shareholders, agents, and employees, regardless of any conflicting provision in Seller's policies to the contrary. To the extent permitted by law, Seller and its insurers shall be required to waive all rights of recovery from or subrogation against SCE, its subsidiaries and affiliates, and their respective officers, directors, shareholders, agents, employees and insurers. The Commercial General Liability, Pollution Liability and Umbrella/Excess Liability insurance required above shall name SCE, its subsidiaries and affiliates, and their respective officers, directors, shareholders, agents and employees, as additional insureds for liability arising out of Seller's obligations under this Agreement.
- (h) Certificates of Insurance. At the time this Agreement is executed, or within a reasonable time thereafter, and within a reasonable time after coverage is renewed or replaced, Seller shall furnish to SCE certificates of insurance evidencing the coverage required above, written on forms and with deductibles reasonably acceptable to SCE. All deductibles, co-insurance and self-insured retentions applicable to the insurance above shall be paid by Seller. All certificates of insurance shall note that the insurers issuing coverage shall endeavor to provide SCE with at least thirty (30) days' prior written notice in the event of cancellation of coverage. SCE's receipt of certificates that do not comply with the requirements stated herein, or Seller's failure to provide certificates, shall not limit or relieve Seller of the duties and responsibility of maintaining insurance in compliance with the requirements in this Section 30.15 and shall not constitute a waiver of any of the requirements in this Section 30.15.
- (i) Failure to Comply. If Seller fails to comply with any of the provisions of this Section 30.15, Seller, among other things and without restricting SCE's remedies under the law or otherwise, shall, at its own cost and expense, act as an insurer and provide insurance in accordance with the terms and conditions above. With respect to the required Commercial General Liability, Pollution Liability, Umbrella/Excess Liability and Commercial Automobile Liability insurance, Seller shall provide a current, full and complete defense to SCE, its subsidiaries and affiliates, and their respective officers, directors, shareholders, agents, employees, assigns, and successors in interest, in response to a third party claim in the same manner that an insurer would have, had the insurance been maintained in accordance with the terms and conditions set forth above.

30.16. Multiple Originals.

This Agreement may be executed in multiple counterparts, each of which shall be deemed an original of this Agreement and all of which, when taken together, will be deemed to constitute one and the same agreement. The exchange of copies of this Agreement and of signature pages by facsimile transmission or by other electronic means shall constitute effective execution and delivery of this Agreement as to the Parties may be used in lieu of the original Agreement for all purposes. Signatures of the Parties transmitted by facsimile or by other electronic means shall be deemed to be their original signatures for all purposes. Any signature page of this Agreement may be detached from any counterpart of this Agreement without impairing the legal effect of any of the signatures thereon, and may be attached to another counterpart of this Agreement identical in form hereto by having attached to it one or more signature pages.

30.17. Energy Auction.

Pursuant to the Energy Auction Decisions, SCE may be permitted or required to sell certain portions or attributes of or duties related to the Product SCE has acquired under this Agreement (the “Auctioned Rights”) and to enter into agreements as a result of those sales to permit third parties to acquire some or all of the Auctioned Rights and to permit such third parties to act as SCE’s agent regarding some or all of SCE’s duties under this Agreement. Seller acknowledges that SCE may conduct such sales and that such sales may occur pursuant to an auction or other similar sales mechanism as described in the Energy Auction Decisions. Seller agrees to cooperate with SCE with respect to such sales and agrees that in the event a third party acquires any Auctioned Rights, Seller will work with SCE and such third party to implement the sale of such Auctioned Rights, including making necessary amendments to this Agreement to implement such transactions.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized representatives.

<i>[SELLER'S NAME],</i> <i>a [Seller's jurisdiction of organization</i> <i>and type of organization].</i>	SOUTHERN CALIFORNIA EDISON COMPANY, a California corporation.
By: _____ <i>[Name]</i> <i>[Title]</i>	By: _____ Steven Eisenberg <i>Vice President of Energy Contracts</i>
Date: _____	Date: _____

APPENDIX A DEFINITIONS

“AB 32” means the California Global Warming Act of 2006, Assembly Bill 32 (2006) and the regulations promulgated thereunder (including, without limitation, the GHG Regulations) by any authorized Governmental Authority.

“AB 32 Compliance Obligation” has the meaning set forth for “Compliance Obligation” in the GHG Regulations as it relates to Seller.

“Actual Efficiency Factor” or “AEF” has the meaning set forth in Section 9.06(a).

“ADS” has the meaning set forth in the Tariff.

“Affiliate” means, with respect to a Party, any entity that, directly or indirectly, through one or more intermediaries, controls, or is controlled by, or is under common control with such Party. For this purpose, “control” means the direct or indirect ownership of fifty percent (50 %) or more of the outstanding capital stock or other equity interests having ordinary voting power.

“Aggregate Network Upgrade Costs” has the meaning set forth in Section 4.02(a).

“Agreement” has the meaning set forth in the preamble.

“Air Pollution Control District” means a district as defined by Section 39025 of the California Health and Safety Code, Division 26, Air Resources.

“Ancillary Service Regional Limits” has the meaning set forth in the Tariff.

“Ancillary Services” or “A/S” means Spinning Reserve, Non-Spinning Reserve, replacement reserves, Regulation Up or Regulation Down or any other ancillary service defined in the Tariff.

“Ancillary Services Capacity” or “A/S Capacity” means Capacity associated with Spinning Reserve, Non-Spinning Reserve, Regulation Up or Regulation Down, as well as any other interconnected operation services as the CAISO develops or deems to be ancillary services, available from any Storage Unit during the Delivery Period.

“Applicable Laws” means all constitutions, treaties, laws, ordinances, rules, regulations, interpretations, permits, judgments, decrees, injunctions, writs and orders of any Governmental Authority that apply to either or both of the Parties, the Project or the terms of this Agreement including, without limitation, the Tariff.

“Approval Date” has the meaning set forth in Section 2.02.

“Arbitrator” has the meaning set forth in Section 27.03.

“A/S Availability” means the amount of Ancillary Services Capacity available to SCE under this Agreement from a Storage Unit during any Settlement Interval.

“A/S Capacity Payment Reduction” has the meaning set forth in Section 10.01(d)(iii).

“A/S Price Adjustment Factor” has the meaning set forth in Section 10.01(d)(ii).

“A/S Maximum Capacity” is as set forth in Appendix 1.01 for each applicable Ancillary Service, the maximum capacity for a particular region in which such Ancillary Service is available.

“Associated Ancillary Services Energy” means the Energy expressed in megawatt-hours expressly associated with the Ancillary Service Capacity made available from any Storage Unit at the instruction of the CAISO.

“Associated Energy” means the Energy expressed in megawatt-hours or kilowatt-hours dispatched under this Agreement.

“Auctioned Rights” has the meaning set forth in Section 30.17.

“Automatic Generation Control” or “AGC” means the remote signal control of a Storage Unit’s output.

“Availability Incentive Payments” has the meaning set forth in the Tariff.

“Availability Notice” has the meaning set forth in Section 20.01.

“Availability Standards” has the meaning set forth in the Tariff.

“Available Capacity” means, collectively, Available Charging Capacity, Available Discharging Capacity, and Available Storage Capacity.

“Available Charging Capacity” means the amount of Charging Capacity that a Storage Unit is capable of providing under this Agreement during any Settlement Interval.

“Available Discharging Capacity” means the amount of Discharging Capacity that a Storage Unit is capable of providing under this Agreement during any Settlement Interval. If a Storage Unit’s Available Discharging Capacity during any Settlement Interval is below PMIN, then the Available Discharging Capacity for such Storage Unit shall be deemed zero (0) for such Settlement Interval.

“Available Storage Capacity” means the Storage Capacity amount of a Storage Unit for the applicable Settlement Interval. For purposes of this definition, the amount of Available Storage Capacity shall be expressed in megawatts according to the following:

Available Storage Capacity = (Storage Capacity / Maximum Storage Level) * SU Contract Capacity

“Bankrupt” means with respect to any entity, such entity (i) files a petition or otherwise commences, authorizes, or acquiesces in the commencement of a proceeding or cause of action under any bankruptcy, insolvency, reorganization or similar law, or has any such petition filed or commenced against it, (ii) makes an assignment or any general arrangement for the benefit or creditors, (iii) otherwise becomes bankrupt or insolvent (however evidenced), (iv) has a

liquidator, administrator, receiver, trustee, conservator or similar official appointed with respect to it or any substantial portion of its property or assets, or (v) is generally unable to pay its debts as they fall due.

“Bid” has the meaning set forth in the Tariff.

“Business Day” means any day except a Saturday, Sunday, the Friday immediately following the U.S. Thanksgiving holiday, or a Federal Reserve Bank holiday.

“Buyer” has the meaning set forth in the preamble.

“Buyer Dispatched Test” has the meaning set forth in Section 7.01(b).

“CAISO” means the California Independent System Operator, a state chartered, nonprofit, public benefit corporation that controls certain transmission facilities of all participating transmission owners and dispatches certain electric generation units and loads, or any successor entity performing the same functions.

“CAISO Certification” means the certification and testing requirements for a storage unit set forth in the Tariff, including certification and testing for all ancillary services and PMAX and PMIN.

“CAISO Grid” means the system of transmission lines and associated facilities of the participating transmission owners that have been placed under the CAISO’s operational control.

“CAISO Markets” has the meaning set forth in the Tariff.

“CAISO Uninstructed Deviation Penalty” or “UDP” has the meaning set forth in the Tariff.

“Calculable Month” has the meaning set forth in Section 9.06(a).

“Calculated Month” has the meaning set forth in Section 9.06(a)(v).

“California Climate Action Registry” or “CCAR” means the registry contemplated in CPUC Rulemaking 06-04-009 (April 13, 2006).

“California Energy Commission” or “CEC” means the State Energy Resources Conservation and Development Commission as defined and used in Section 25104 in the California Public Resources Code, Division 15, Energy Conservation and Development (Sections 25000, *et seq*).

“Capacity” means, collectively, Charging Capacity, Discharging Capacity, and Storage Capacity.

“Capacity Availability” means, for each Settlement Interval, the lesser of the following for each Storage Unit:

- (a) the Available Storage Capacity;
- (b) the Available Charging Capacity; or

- (c) (i) the Available Discharging Capacity, if the Storage Unit operates within the Performance Tolerance Band, or (ii) the Available Discharging Capacity, less the product of (x) the difference between (A) Scheduled Energy and (B) Qualifying Delivered Energy, and (y) the number of Settlement Intervals in one hour, if such Storage Unit operates below the Performance Tolerance Band Lower Limit; *provided*, if Scheduled Energy exceeds Contract Capacity Energy in a Settlement Interval, then, for the purpose of calculating Capacity Availability under this subsection (c) of this definition (including the determination of the Performance Tolerance Band), Scheduled Energy shall be deemed to equal Contract Capacity Energy for that Settlement Interval.

In no event shall the Capacity Availability be less than zero (0) MW or greater than SU Contract Capacity.

“Capacity Price Adjustment Factor” has the meaning set forth in Section 10.01(c)(iii).

“Charging Capacity” means the maximum dependable operating capability of any storage resource to charge electric energy into a storage device, and shall include, without limitation, Ancillary Services Capacity, and any other products that may be developed or evolve from time to time during the Term that relate to the capability of a storage resource to store and charge energy.

“Charging Energy Costs” has the meaning set forth in Section 16.03.

“Charging Energy Requirements” means the electric energy requirements of a Storage Unit that is withdrawn from the PTO’s electrical system or the CAISO Grid to be stored by the Storage Unit and discharged at a later time. Under no circumstances does Charging Energy Requirements include Station Use.

“Charging Notice” means the operating instruction, and any subsequent updates, given by SCE or the CAISO to Seller, directing the applicable Storage Unit to charge at a specific megawatt rate to a specified State of Charge. Charging Notices may be communicated electronically, via facsimile, telephonically or other verbal means. Telephonic or other verbal communications shall be documented (either recorded by tape, electronically or in writing) and such recordings shall be made available to both SCE and Seller upon request for settlement purposes. For the avoidance of doubt, any Schedule, including self-schedules, submitted by SCE or awarded by the CAISO in order to effectuate a Seller Initiated Test shall not be considered a Charging Notice.

“Claiming Party” means the Party claiming a Force Majeure under Article Twenty-Three.

“Collateral Assignment Agreement” has the meaning set forth in Section 14.01.

“Commercial Operation” means that a Storage Unit has (i) successfully completed the demonstration set forth in Appendix 7, (ii) has met the requirements of Appendix 7, Part II.C., and (iii) SCE has accepted the test results.

“Compliance Showings” means the (a) Local RAR compliance or advisory showings (or similar or successor showings), (b) RAR compliance or advisory showings (or similar or successor

showings), and (c) Flexible RAR compliance or advisory showings (or similar successor showings), in each case, a load-serving entity is required to make to the CPUC (and, to the extent authorized by the CPUC, to the CAISO) pursuant to the Resource Adequacy Rulings, to the CAISO pursuant to the Tariff, or to any Governmental Authority having jurisdiction.

“Confidential Information” means any and all written or recorded or oral information, data, analyses, documents, and materials furnished or made available by a Party or its Representatives to the other Party or its Representatives in connection with this Agreement, including Dispatch Data, and any and all analyses, compilations, studies, documents, or other material prepared by the receiving Party or its Representatives to the extent containing or based upon such information, data, analyses, documents, and materials, and the terms and conditions and other facts with respect to this Agreement. Confidential Information does not include information, data, analyses, documents, or materials that (i) are when furnished or thereafter become available to the public other than as a result of a disclosure by the receiving Party or its Representatives, or (ii) are already in the possession of or become available to the receiving Party or its Representatives on a nonconfidential basis from a source other than the disclosing Party or its Representatives, *provided*, to the best knowledge of the receiving Party or its Representatives, as the case may be, such source is not and was not bound by an obligation of confidentiality to the disclosing Party or its Representatives, or (iii) the receiving Party or its Representatives can demonstrate that the information has been independently developed without a violation of this Agreement.

“Congestion Revenue Right” has the meaning set forth in the Tariff.

“Construction Report” has the meaning set forth in Section 6.01.

“Contract Capacity” has the meaning set forth in Section 1.01(a) and Appendix 1.01.

“Contract Capacity Energy” means the amount of Energy capable of being discharged, expressed in megawatt hours, by a Storage Unit based on its SU Contract Capacity.

“Contract Capacity & Ancillary Services Tests” means the testing procedures, requirements, and protocols set forth in Appendix 7.

“Contract Year” means the months within each calendar year during the Delivery Period. The initial Contract Year would be from the Initial Delivery Date until December 31st of such year. The second (2nd) Contract Year would be from January 1st through December 31st of the year immediately following the initial Contract Year. The final Contract Year will be January 1st of the last year during which the Delivery Period occurs, through the last day of the Delivery Period.

“Control Area” means the electric power system (or combination of electric power systems) under the operational control of the CAISO or any other electric power system under the operational control of another organization vested with authority comparable to that of the CAISO.

“Cost Allocation Mechanism Group” or “CAM” means the advisory group established by the CPUC in Decision 07-12-052.

“Costs” means with respect to the Non-Defaulting Party, brokerage fees, commissions and other similar third party transaction costs and expenses reasonably incurred by the Non-Defaulting Party either in terminating any arrangement pursuant to which it has hedged its obligations under the Agreement or entering into new arrangements which replace the Product. With respect to SCE, Costs shall be based on replacing the Product with product from energy storage technology in the *[Western LA Basin or Moorpark Sub-Area]*.

“CPUC” means the California Public Utilities Commission or any successor thereto.

“CPUC Filing Guide” is the annual document issued by the CPUC which sets forth the guidelines, requirements and instructions for load-serving entities to demonstrate compliance with the CPUC’s resource adequacy program.

“Credit Rating” means with respect to any entity, the rating then assigned to such entity’s unsecured, senior long-term debt obligations (not supported by third party credit enhancements) or if such entity does not have a rating for its unsecured, senior long-term debt, then the rating then assigned to such entity as an issuer rating by the Ratings Agencies.

“Daily Delay Damages” means liquidated damages in the amount of the product of \$123.29/MW and the Expected Contract Capacity of all of the Storage Unit(s) for each day of delay.

“Data Acquisition System” or “DAS” has the meaning specified in Appendix 7, PART III.B.

“Day-Ahead” has the meaning set forth in the Tariff.

“Day-Ahead Market” has the meaning set forth in the Tariff.

“Defaulting Party” has the meaning set forth in Sections 3.01 and 3.02.

“Delivered Energy” means, in respect of a Storage Unit during the Delivery Period, the amount of Energy discharged by such Storage Unit and delivered during each Settlement Interval at the Energy Delivery Point as measured by the Energy Metering Equipment, and subject to adjustments identified in this Agreement. The Delivered Energy in any hour is equal to the sum of the Delivered Energy for each Settlement Interval during such hour.

“Delivery Date Security” has the meaning set forth in Section 13.02(a).

“Delivery Period” has the meaning set forth in Section 2.04.

“Discharging Capacity” means the maximum dependable operating capability of any storage resource to discharge energy, and shall include, without limitation, Ancillary Services Capacity, and any other products that may be developed or evolve from time to time during the Term that relate to the capability of a storage resource to store and discharge energy.

“Dispatch Data” means data, information or other material in any way related to any schedule, dispatch, charging, discharges or instruction of a Storage Unit, including any schedules, dispatches, Dispatch Notices, discharges, charges, Charging Notice, settlement statements, Ancillary Services dispatches or awards, if applicable.

“Dispatch Notice” means the operating instruction, and any subsequent updates, given by SCE to Seller, directing the applicable Storage Unit to discharge at a specified megawatt output or a dispatch given by the CAISO. Dispatch Notices may be communicated electronically (i.e. through ADS or e-mail), via facsimile, telephonically or other verbal means. Telephonic or other verbal communications shall be documented (either recorded by tape, electronically or in writing) and such recordings shall be made available to both SCE and Seller upon request for settlement purposes. For the avoidance of doubt, any Schedule, including self-schedules, submitted by SCE or awarded by the CAISO in order to effectuate a Seller Initiated Test shall not be considered a Dispatch Notice for the period that is the greater of (i) the number of hours required to complete the test, or (ii) the Storage Unit(s)’ Minimum Run Time.

“Dispute” means any and all disputes, claims or controversies arising out of, relating to, concerning or pertaining to the terms of this Agreement, or to either Party’s performance or failure of performance under this Agreement.

“Disqualified Stock” means any capital stock that, by its terms (or by the term of any security instrument into which it is convertible, or for which it is exchangeable, in each case at the option of the holder of the capital stock), or upon the happening of any event, matures or is mandatorily redeemable, pursuant to a sinking fund obligation or otherwise, or redeemable at the option of the holder of the capital stock, in whole or in part, on or prior to the date that is ninety-one (91) days after the last day of the Term.

“Distributed Control System” or “DCS” means the integrated automation system for monitoring and controlling the critical operation functions of a facility that perform tasks essential to the charge, discharge and storage of electricity.

“Early Termination Date” has the meaning set forth in Section 3.03.

“Effective Date” has the meaning set forth in the preamble.

“Emission Reduction Credits” or “ERC(s)” means emission reductions that have been authorized by a local air pollution control district pursuant to California Division 26 Air Resources; Health and Safety Code Sections 40709 and 40709.5, whereby a district has established a system by which all reductions in the emission of air contaminants that are to be used to offset certain future increases in the emission of air contaminants shall be banked prior to use to offset future increases in emissions.

“Energy” means all electrical energy discharged and stored by the Project or a Storage Unit, measured in kilowatt-hours or multiples units thereof. Energy shall include without limitation, Associated Energy, Associated Ancillary Services Energy, Supplemental Energy, and any other electrical energy products that may be developed or evolve from time to time during the Term.

“Energy Adjustment Payment” has the meaning set forth in Section 9.06.

“Energy Adjustment Period” has the meaning set forth in Section 9.06(a)(y).

“Energy Auction Decisions” means CPUC Decision 06-07-029, 07-09-044 and any other existing or subsequent CPUC decisions or rulings related to such decisions or the cost-allocation of the benefits and costs of generation or storage resources procured by an investor owned utility, including without limitation any decisions or rulings related to any rights, or requirements, of an investor owned utility to hold auctions, or similar sales, of products procured in connection with procuring generation in order to implement the allocation of the benefits and costs of such generation.

“Energy Delivery Point” has the meaning set forth in Section 1.03(a).

“Energy Efficiency Capacity Reduction Payment” has the meaning set forth in Section 10.02.

“Energy Efficiency Tolerance Band” has the meaning set forth in Section 9.06(d).

“Energy Metering Equipment” means, for the Project, a CAISO approved revenue quality meter or meters, CAISO-approved data processing gateway or remote intelligence gateway, telemetering equipment and data acquisition services sufficient for monitoring, recording and reporting, in real time, all electric energy discharged by the Storage Unit(s) and used to charge the Storage Unit(s), excluding Station Use.

“Environmental Costs” means costs incurred in connection with acquiring and maintaining all environmental permits and licenses for the Project, and the Project’s compliance with all applicable environmental laws, rules and regulations, including capital costs for pollution mitigation or installation of emissions control equipment required to permit or license the Project, all operating and maintenance costs for operation of pollution mitigation or control equipment, costs of permit maintenance fees and emission fees as applicable, and the costs of all Emission Reduction Credits or Marketable Emission Trading Credits required by any applicable environmental laws, rules, regulations, and permits to operate, and costs associated with the disposal and clean-up of hazardous substances introduced to the Site, and the decontamination or remediation, on or off the Site, necessitated by the introduction of such hazardous substances on the Site.

“EPC Contract” means Seller’s engineering, procurement and construction contract with the EPC Contractor.

“EPC Contractor” means the entity chosen by Seller to perform the engineering, procurement and construction activities for the Project.

“Equitable Defenses” means any bankruptcy, insolvency, reorganization and other laws affecting creditors’ rights generally, and with regard to equitable remedies, the discretion of the court before which proceedings to obtain same may be pending.

“Event of Default” has the meaning set forth in Sections 3.01 and 3.02.

“Excess Network Upgrade Costs” has the meaning set forth in Section 4.02.

“Existing Zone” has the meaning set forth in the Tariff.

“Existing Zone Generation Trading Hub” has the meaning set forth in the Tariff.

“Expected Contract Capacity” means the expected capability of each Storage Unit to discharge energy as measured in megawatts at the Energy Delivery Point available for daily planning and operation purposes during the summer conditions at the Site based on historical weather data for the last 30 years, and as set forth in Appendix 1.01.

“Expected Initial Delivery Date” is the date set forth in Section 2.03.

“Federal Funds Effective Rate” means the rate for that day opposite the caption “Federal Funds (effective)” as set forth in the weekly statistical release as H.15(519), or any successor publication, published by the Board of Governors of the Federal Reserve System.

“FERC” means the Federal Energy Regulatory Commission, or any division thereof.

“Final CPUC Approval” means a decision of the CPUC that (i) is final and no longer subject to appeal, which approves the Agreement in full and in the form presented on terms and conditions acceptable to SCE in its sole discretion, including without limitation terms and conditions related to cost recovery and cost allocation of amounts paid to Seller under the Agreement; (ii) does not contain conditions or modifications unacceptable to SCE, in SCE’s sole discretion; and (iii) finds that any procurement pursuant to this Agreement satisfies the requirement to procure energy storage resources under CPUC Decision 13-02-015.

“Final Test Plan” has the meaning set forth in Appendix 7, PART III.A.

“Fitch” means Fitch Ratings Ltd. or its successor.

“Flexible RAR” means the flexible capacity requirements established for load-serving entities by the CPUC pursuant to the Resource Adequacy Rulings, the CAISO pursuant to the Tariff, or by any other Governmental Authority having jurisdiction.

“Force Majeure” means any event or circumstance to the extent beyond the control of, and not the result of the negligence of, or caused by, the Party seeking to have its performance obligation excused thereby, which by the exercise of due diligence such Party could not reasonably have been expected to avoid and which by exercise of due diligence it has been unable to overcome including but not limited to (but only to the extent that the following examples satisfy such definition): (a) acts of God such as droughts, floods, earthquakes, (b) adverse geological or underground conditions that could not have been discovered through a reasonably prudent geophysical site survey, (c) war (declared or undeclared), riots, insurrection, rebellion, acts of the public enemy, acts of terrorism and sabotage, blockades, and embargoes, and (d) industry-wide or general (i.e. not directed specifically at or by the party claiming Force Majeure) strikes, lockouts or other labor disputes. Force Majeure shall not include (i) a failure of performance of any other entity, including any entity providing electric transmission service to the Project,

except to the extent that such failure was caused by an event that would otherwise qualify as a Force Majeure event, (ii) failure to timely apply for or obtain permits, or (iii) breakage or malfunction of equipment (except to the extent that such failure was caused by an event that would otherwise qualify as a Force Majeure).

“Forced Outage” has the meaning set forth in the Tariff.

“Forward Settlement Amount” means the Non-Defaulting Party’s Costs and Losses, on the one hand, netted against its Gains, on the other.

If the Non-Defaulting Party’s Costs and Losses exceed its Gains, then the Forward Settlement Amount shall be an amount owing to the Non-Defaulting Party.

If the Non-Defaulting Party’s Gains exceed its Costs and Losses, then the Forward Settlement Amount shall be Zero dollars (\$0).

The Forward Settlement Amount does not include consequential, incidental, punitive, exemplary or indirect or business interruption damages.

“GAAP” means United States generally accepted accounting principles as in effect from time to time, consistently applied.

“GADS” means the Generating Availability Data System, or its successor.

“Gains” means, with respect to any Party, an amount equal to the present value of the economic benefit to such Party, if any (exclusive of Costs), resulting from the termination of the Agreement, determined in a commercially reasonable manner, as described below. With respect to SCE, Gains shall be based on replacing the Product with product from energy storage technology in the *[Western LA Basin or Moorpark Sub-Area]*.

Factors used in determining the economic benefit to a Party may include, without limitation, reference to information supplied by one or more third parties, which shall exclude Affiliates of the Non-Defaulting Party, including without limitation, quotations (either firm or indicative) of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets, comparable transactions, forward price curves based on economic analysis of the relevant markets, settlement prices for comparable transactions at liquid trading hubs (e.g., NYMEX), all of which should be calculated for the remaining Term of this Agreement.

Only if the Non-Defaulting Party is unable, after using commercially reasonable efforts, to obtain third party information to determine the gain of economic benefits, *then* the Non-Defaulting Party may use information available to it internally suitable for this purpose in accordance with prudent industry practices.

“Generation Management System” or “GMS” means the automated system employed by SCE real time operations to remotely monitor, dispatch, and control each Storage Unit.

“Generation Operations Center” or “GOC” means the location of SCE’s real time operations personnel.

“Generator Operator” means the entity that operates Storage Unit(s) and performs the functions of supplying energy and interconnected operations services and the other functions of a generator operator as described in NERC’s Statement of Compliance Registry Criteria located on the NERC website.

“Generator Owner” means an entity that owns the Project and has registered with NERC as the entity responsible for complying with those NERC Reliability Standards applicable to owners of storage units as set forth in the NERC Reliability Standards.

“GHG Charges” means any taxes, charges or fees imposed on the Storage Unit(s) or Seller by a Governmental Authority for Greenhouse Gas emitted by and attributable to the Storage Unit(s) during the Delivery Period, but excluding the AB 32 Compliance Obligation.

“GHG Regulations” means Subchapter 10 Climate Change, Article 5, Sections 95800 to 96022, Title 17, California Code of Regulations, as amended or supplemented from time to time.

“Governmental Authority” means any federal, state, local, municipal, or other governmental, executive, administrative, judicial or regulatory entity, and the CAISO or any other transmission authority, exchange or grid control operator having or asserting jurisdiction over a Party, any Storage Unit, the Project or this Agreement.

“Governmental Charges” has the meaning set forth in Section 15.01.

“Greenhouse Gas” has the meaning set forth in the GHG Regulations.

“Grid Control Center” means the location of the personnel responsible for operating the applicable transmission grid and/or coordinating same with the CAISO.

“Guaranteed Efficiency Factor Max” has the meaning set forth in Section 9.06(c) and Appendix 1.01.

“Guaranteed Efficiency Factor Min” has the meaning set forth in Section 9.06(b) and Appendix 1.01.

“HASP” has the meaning set forth in the Tariff or any other successor process that replaces HASP.

“Hazardous Material” means any substance, waste, or material which has been designated as hazardous or toxic by the United States Environmental Protection Agency, the federal Occupational Safety and Health Administration (“OSHA”), California OSHA, the California Environmental Protection Agency, the California Office of Environmental Health Hazard Assessment, the California Department of Toxic Substances Control, the California State Water Resources Control Board, or any other environmental agency now or subsequently authorized to regulate materials in the environment or workplace.

“IFM” has the meaning set forth in the Tariff.

“Indemnified Party” has the meaning set forth in Section 28.03.

“Indemnitor” has the meaning set forth in Section 28.03.

“Imbalance Energy” has the meaning set forth in the Tariff. To the extent this Tariff definition refers to or is applicable to a generation resource, such definition shall apply to the Storage Unit(s) as if the Storage Unit(s) are generation resources.

“Independent Engineer” or “IE” has the meaning set forth in Section 8.02(d).

“Independent Evaluator” has the meaning set forth in CPUC Decision 04-12-048.

“Industry Standards” has the meaning set forth in Section 8.01(a).

“Initial Commercial Operation Test” means, the testing procedures, requirements, and protocols set forth in Appendix 7.

“Initial Delivery Date” has the meaning set forth in Section 2.04.

“Interconnection Facilities” means all apparatus installed between a Storage Unit and the Point of Interconnection on the PTO’s system, other participating transmission owner’s system, or the CAISO Grid, to interconnect the Project to make available to SCE the Contract Capacity and Associated Energy and to charge and discharge the Storage Unit(s), including connection, Tie-Line, transformation, switching, metering, communications, control, and safety equipment, such as equipment required to protect (a) the PTO’s electric system (or other participating transmission owner’s system to which the PTO’s electric system is connected, including the CAISO Grid) and SCE’s customers from faults occurring at the Storage Unit(s), and (b) the Storage Unit(s) from faults occurring on the PTO’s electric system or on other participating transmission owner’s system to which the PTO’s electric system is connected.

“Interconnection Queue Position” is the order of Seller’s valid request for interconnection relative to all other valid interconnection requests, as specified in Section 1.03(c).

“Interconnection Study” or “Interconnection Studies” means any of the studies defined in the Tariff or any PTO’s tariff that reflect methodology and costs to interconnect the Project to the PTO’s electric grid.

“Interest Rate” means, for any date, the lesser of (a) the per annum rate of interest equal to the bank prime lending rate as may from time to time be published by the Federal Reserve in their H.15 Statistical Release, Selected Interest Rates (daily) or any successor publication as published by the Board of Governors of the Federal Reserve System, on such date (or if not published on such day on the most recent preceding day on which published), plus two percent (2%), and (b) the maximum rate permitted by Applicable Law.

“JAMS” means Judicial Arbitration and Mediation Services, Inc.

“kW” means kilowatt or kilowatts.

“kWh” means kilowatt-hour or kilowatt-hours.

“Lender” means any and all financial institutions that provide to Seller any development, bridge, construction, permanent debt, tax equity, Performance Assurance, or other form of financing or refinancing, or other credit support, relating to the Project.

“Letter of Credit” means an irrevocable, nontransferable standby letter of credit issued by a Qualified Institution, which letter of credit shall be substantially in the form of Appendix 13.03(b) and reasonably acceptable to SCE. All Letter of Credit costs shall be borne by Seller.

“Letter of Credit Default” means with respect to a Letter of Credit, the occurrence of any of the following events: (a) the issuer of such Letter of Credit fails to be a Qualified Institution; (b) the issuer of such Letter of Credit fails to comply with or perform its obligations under such Letter of Credit; (c) the issuer of such Letter of Credit disaffirms, disclaims, repudiates or rejects, in whole or in part, or challenges the validity of, such Letter of Credit; (d) such Letter of Credit fails or ceases to be in full force and effect at any time; or (e) the issuer of such Letter of Credit becomes Bankrupt; *provided*, no Letter of Credit Default shall occur or be continuing in any event with respect to a Letter of Credit after the time such Letter of Credit is required to be canceled or returned to a Party in accordance with the terms of this Agreement.

“LMP” has the meaning set forth in the Tariff.

“Local Capacity Area” has the meaning set forth in the Tariff.

“Local RAR” means the local resource adequacy requirements established for load-serving entities by the CPUC pursuant to the Resource Adequacy Rulings, the CAISO pursuant to the Tariff, or by any other Governmental Authority having jurisdiction. Local RAR may also be known as local area reliability, local resource adequacy, local resource adequacy procurement requirements, or local capacity requirement in other regulatory proceedings or legislative actions.

“Losses” means with respect to either Party, an amount equal to the present value of the economic loss to it, if any (exclusive of Costs), resulting from the termination of the Agreement, determined in a commercially reasonable manner, as described below. With respect to SCE, Losses shall be based on replacing the Product with product from energy storage technology in the *[Western LA Basin or Moorpark Sub-Area]*.

Factors used in determining economic loss to a Party may include, without limitation, reference to information supplied by one or more third parties, which shall exclude Affiliates of the Non-Defaulting Party, including without limitation, quotations (either firm or indicative) of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets, comparable transactions, forward price curves based on economic analysis of the relevant markets, settlement prices for comparable transactions at liquid trading hubs (e.g., NYMEX), all of which should be calculated for the remaining Term of this Agreement.

Only if the Non-Defaulting Party is unable, after using commercially reasonable efforts, to obtain third party information to determine the loss of economic benefits, then the Non-Defaulting Party may use information available to it internally suitable for these purposes in accordance with prudent industry practices.

“Market-Based Rate Authority” means authority granted by FERC to charge market-based rates for electrical power pursuant to Section 205 of the Federal Power Act, 16 U.S.C. § 824d.

“Market Clearing Price” or “MCP” means for each Settlement Interval, the Day-Ahead Market price for the hour in which such Settlement Interval falls for SP-15.

“Marketable Emission Trading Credits” means without limitation, emissions trading credits or units pursuant to the requirements of California Division 26 Air Resources; Health & Safety Code Section 39616 and Section 40440.2 for market based incentive programs such as the South Coast Air Quality Management District’s Regional Clean Air Incentives Market, also known as RECLAIM, and allowances of sulfur dioxide trading credits as required under Title IV of the Federal Clean Air Act (*see* 42 U.S.C. § 7651b.(a) to (f)).

“Master File” has the meaning set forth in the Tariff.

“Maximum Daily Start-Ups” has the meaning set forth in the Tariff. To the extent this Tariff definition refers to or is applicable to a generation resource, such definition shall apply to the Storage Unit(s) as if the Storage Unit(s) are generation resources; *provided*, it shall only apply to the Storage Unit(s)’ ability to discharge energy and for instances where the Storage Unit(s) are discharging energy.

“Maximum Storage Level” has the meaning set forth in Appendix 1.01.

“Mediator” has the meaning set forth in Section 27.02.

“Meter Service Agreement For CAISO Metered Entities” or “MSA” has the meaning set forth in the Tariff.

“Milestone Schedule” means the completed schedule in the form of Appendix 6.01(A), setting forth Seller’s engineering, permitting, procurement, contract, financing, and construction milestones.

“Minimum Down Time” has the meaning set forth in the Tariff. To the extent this Tariff definition refers to or is applicable to a generation resource, such definition shall apply to the Storage Unit(s) as if the Storage Unit(s) are generation resources; *provided*, it shall only apply to the Storage Unit(s)’ ability to discharge energy and for instances where the Storage Unit(s) are discharging energy.

“Minimum Load” has the meaning set forth in the Tariff. To the extent this Tariff definition refers to or is applicable to a generation resource, such definition shall apply to the Storage Unit(s) as if the Storage Unit(s) are generation resources; *provided*, it shall only apply to the

Storage Unit(s)' ability to discharge energy and for instances where the Storage Unit(s) are discharging energy.

"Minimum Operating Limit" has the meaning set forth in the Tariff. To the extent this Tariff definition refers to or is applicable to a generation resource, such definition shall apply to the Storage Unit(s) as if the Storage Unit(s) are generation resources; *provided*, it shall only apply to the Storage Unit(s)' ability to discharge energy and for instances where the Storage Unit(s) are discharging energy.

"Minimum Run Time" has the meaning set forth in the Tariff. To the extent this Tariff definition refers to or is applicable to a generation resource, such definition shall apply to the Storage Unit(s) as if the Storage Unit(s) are generation resources; *provided*, it shall only apply to the Storage Unit(s)' ability to discharge energy and for instances where the Storage Unit(s) are discharging energy.

"Monthly Available A/S Capacity" has the meaning set forth in Section 10.01(d)(i).

"Monthly Capacity Payment" has the meaning set forth in Section 9.02.

"Monthly Capacity Price" is the price as set forth in Appendix 9.02.

"Moody's" means Moody's Investor Services, Inc. or its successor.

"Moorpark Sub-Area High Voltage Substations" means the following substations located in the CAISO Control Area: Goleta, Moorpark, Santa Clara, Mandalay, and Ormond Beach.

"Moorpark Sub-Area Project" means a storage facility that directly connects to a (i) Moorpark Sub-Area High Voltage Substation, or (ii) lower voltage substation that electrically—connects to a Moorpark Sub-Area High Voltage Substation. *[SCE Note: if applicable]*

"MW" means megawatt or megawatts.

"MWh" means megawatt-hours.

"NERC" means the North American Electric Reliability Council, or any successor thereto.

"NERC/GADS Protocols" means the NERC Generating Availability Data System protocols, as may be updated from time to time.

"NERC Holidays" means "Additional Off-peak Days" as defined by NERC on the NERC website.

"NERC Reliability Standards" means those reliability standards applicable to a generating or storage facility, or to the Generator Owner or the Generator Operator with respect to the generating or storage facility, that are adopted by NERC and approved by the applicable regulatory authorities and available on the NERC website.

"Net Qualifying Capacity" has the meaning set forth in the Tariff.

“Network Upgrades” means all apparatus, modifications, and upgrades to the PTO’s electric system, CAISO Grid or, if applicable, participating transmission owner’s system that are required at or beyond the Point of Interconnection to accommodate the Project’s output.

“Network Upgrades Cap” has the meaning set forth in Section 4.02(b).

“New Resource” means that the Project (a) has a remaining design life of at least [#] years after the Initial Delivery Date as attested by an engineering assessment performed by a professional mechanical engineer (with experience acceptable to SCE in its sole discretion) licensed by the State of California; (b) will provide incremental capacity to the region of the CAISO’s control area known as SP15; and (c) is a *[Western LA Basin Project or Moorpark Sub-Area Project]*.

“Non-Availability Charges” has the meaning set forth in the Tariff.

“Non-Defaulting Party” has the meaning set forth in Section 3.03.

“Non-SCE Charge” has the meaning set forth in Section 16.05.

“Non-SCE Dispatch” means a dispatch by Seller either (a) pursuant to a Seller Initiated Test or (b) as required by Applicable Laws.

“Non-Specified RA Replacement Capacity” has the meaning set forth in the Tariff.

“Non-Spinning Reserve” has the meaning set forth in the Tariff.

“Notice” has the meaning set forth in Section 30.02.

“Obligation Month” has the meaning set forth in Section 11.01.

“Operating Day” means a day within the Delivery Period on which the Project operates.

“Operating Reserve Ramp Rate” has the meaning set forth in the Tariff.

“Operating Restrictions” means, subject to Section 20.05(b), limitations on SCE’s ability to schedule and use Capacity, Ancillary Services, and Energy that are identified in Appendix 1.01.

“Outage” has the meaning set forth in the Tariff.

“Outage Management System” has the meaning set forth in Section 20.01.

“Outage Schedule” has the meaning set forth in Section 22.01.

“Pacific Prevailing Time” or “PPT” means Pacific Daylight Time when California observes Daylight Savings Time and Pacific Standard Time otherwise.

“Participating Generator Agreement” or “PGA” has the meaning set forth in the Tariff.

“Participating Load Agreement” or “PLA” has the meaning set forth in the Tariff.

“Participating Transmission Owner” or “PTO” means any entity or entities responsible for the interconnection of the Project with a Control Area or transmitting the Energy on behalf of Seller from the Project to the Point of Interconnection.

“Party” or “Parties” has the meaning set in the preamble.

“Performance Assurance” means collateral, including Delivery Date Security, in the form of cash, or Letter of Credit.

“Performance Tolerance Band” means the lesser of (a) three percent (3%) of a Storage Unit’s PMax divided by the number of Settlement Intervals in an hour, (b) five (5) MW divided by the number of Settlement Intervals in an hour, or (c) the applicable Regulation Award divided by the number of Settlement Intervals in an hour. If, at any time, the CAISO implements changes to the Performance Tolerance Band, then the Parties agree to negotiate in good faith to amend this definition to maintain the economic benefits and burdens contemplated under this Agreement.

“Performance Tolerance Band Lower Limit” means the quantity of Energy determined for a Settlement Interval equal to Scheduled Energy minus the Performance Tolerance Band.

“Performance Tolerance Band Upper Limit” means the quantity of Energy determined for a Settlement Interval equal to Scheduled Energy plus the Performance Tolerance Band.

“Permit Requirements” means any requirement or limitation imposed as a condition of a permit or other authorization relating to construction or operation of the Project or related facilities, including limitations on any pollutant emissions levels, limitations on fuel combustion or heat input throughput, limitations on operational levels or operational time, limitations on any specified operating constraint, requirements for acquisition and provision of any Emission Reduction Credits or Marketable Emission Trading Credits; or any other operational restriction or specification related to compliance with any Applicable Laws.

“Planned Outage” has the meaning set forth in the Resource Adequacy Rulings as applied to storage units as if such storage units were generation resources, namely a planned outage for the routine repair or maintenance of any of the Storage Unit, or for the purposes of new construction work, and does not include any outage designated as forced or unplanned as defined by the CAISO or NERC/GADS Protocols.

“PMAX” or “Pmax” means the applicable CAISO-certified maximum operating level of a Storage Unit.

“PMIN” or “Pmin” means the applicable CAISO-certified minimum operating level of a Storage Unit.

“PNode” has the meaning set forth in the Tariff.

“Point of Interconnection” has the meaning set forth in Section 1.03(b).

“Prevention Equipment” has the meaning set forth in Section 5.01(e).

“Procurement Review Group” or “PRG” has the meaning set forth in Section 29.02(a).

“Product” means any and all Energy, Capacity, Ancillary Services, Ancillary Service Capacity and Resource Adequacy Benefits, or any other benefits associated therewith, associated with the Project under the terms of this Agreement.

“Project” means the Storage Unit(s), Interconnection Facilities (owned by Seller or Seller’s Affiliate) up to the Point of Interconnection, Prevention Equipment, and Protective Apparatus together with all materials, equipment systems, structures, features and improvements necessary to store, charge and discharge electric energy at the facility, excluding the Site, land rights and interests in land and as more fully described in Appendix 1.02. *[SCE Comment: may require additional description in addition to Appendix 1.02]*

“Protective Apparatus” means control devices (such as meters, relays, power circuit breakers and synchronizers) specified in the interconnection agreement or related agreement for the Project.

“Prudent Electrical Practices” means those practices, methods and acts that would be implemented and followed by prudent operators of electric energy storage facilities in the Western United States, similar to the Project, during the relevant time period, which practices, methods and acts, in the exercise of prudent and responsible professional judgment in the light of the facts known or that should reasonably have been known at the time the decision was made, could reasonably have been expected to accomplish the desired result consistent with good business practices, reliability and safety.

Prudent Electrical Practices shall include, at a minimum, those professionally responsible practices, methods and acts described in the preceding sentence that comply with manufacturers’ warranties, restrictions in this Agreement, and the requirements of Governmental Authorities, WECC standards, the CAISO and Applicable Laws.

Prudent Electrical Practices also includes taking reasonable steps to ensure that:

- (a) Equipment, materials, resources, and supplies, including spare parts inventories, are available to meet the needs of the Project;
- (b) Sufficient operating personnel are available at all times and are adequately experienced and trained and licensed as necessary to operate the Storage Units properly and efficiently, and are capable of responding to reasonably foreseeable emergency conditions at the Project and Transmission Emergencies whether caused by events on or off the Site;
- (c) Preventive, routine, and non-routine maintenance and repairs are performed on a basis that ensures reliable, long term and safe operation of the Project, and are performed by knowledgeable, trained, and experienced personnel utilizing proper equipment and tools;
- (d) Appropriate monitoring and testing are performed to ensure equipment is functioning as designed;

- (e) Equipment is not operated in a reckless manner, in violation of manufacturer's guidelines or in a manner unsafe to workers, the general public, or the PTO's electric system or contrary to environmental laws, permits or regulations or without regard to defined limitations such as, flood conditions, safety inspection requirements, operating voltage, current, volt ampere reactive (VAR) loading, frequency, rotational speed, polarity, synchronization, and control system limits; and
- (f) Equipment and components are designed and manufactured to meet or exceed the standard of durability that is generally used for electric energy storage facilities operating in the Western United States and will function properly over the full range of ambient temperature and weather conditions reasonably expected to occur at the Site and under both normal and emergency conditions.

"Qualified Institution" means either (A) a commercial bank or financial institution (that is not an Affiliate of Seller) organized under the laws of the United States or a political subdivision thereof or (B) a U.S. branch office of a foreign bank, and, with respect to both entities identified in clause (A) and (B), (i) (a) a Credit Ratings of at least "A-" by S&P, "A-" by Fitch and "A3" by Moody's, if such entity is rated by the Ratings Agencies; (b) if such entity is rated by only two of the three Ratings Agencies, a Credit Rating from two of the three Ratings Agencies of at least "A-" by S&P, if such entity is rated by S&P, "A-" by Fitch, if such entity is rated by Fitch, and "A" by Moody's, if such entity is rated by Moody's; or (c) a Credit Rating of at least "A-" by S&P or "A3" by Moody's, or "A-" by Fitch if such entity is rated by only one Ratings Agency, and (ii) having shareholder equity (determined in accordance with GAAP) of at least \$1,000,000,000.00 (ONE BILLION AND 00/100 DOLLARS).

"Qualifying Delivered Energy" means the lesser of Delivered Energy or the Performance Tolerance Band Upper Limit for each Settlement Interval during the Delivery Period. Qualifying Delivered Energy shall be zero (0) (i) during a Seller Initiated Test; (ii) during a Non-SCE Dispatch; (iii) if the Delivered Energy is less than PMin minus the Performance Tolerance Band; or (iv) during a Start-Up.

"RAAM" has the meaning set forth in Section 19.05(b).

"RA Compliance Obligations" means the RAR, Local RAR and Flexible RAR.

"RAR" means the resource adequacy requirements established for load-serving entities by the CPUC pursuant to the Resource Adequacy Rulings, the CAISO pursuant to the Tariff, or by any other Governmental Authority having jurisdiction.

"Rated Power Capacity Payment Reduction" has the meaning set forth in Section 10.01(c)(iv).

"Ratings Agency" means any of S&P, Moody's, and Fitch (collectively, the "Ratings Agencies").

"Real-Time Market" has the meaning set forth in the Tariff.

"Reduced Monthly Capacity Payment" has the meaning set forth in Section 10.03.

“Regulation Award” for each Settlement Interval, shall mean either (i) with respect to the Performance Tolerance Band Upper Limit, the greater of the fifteen-minute HASP Regulation Up awards for the period within such Settlement Interval falls, or (ii) with respect to the Performance Tolerance Band Lower Limit, the greater of the fifteen-minute HASP Regulation Down awards for the period within such Settlement Interval falls.

“Regulation Down” has the meaning set forth in the Tariff.

“Regulation Ramp Rate” has the meaning set forth in the Tariff.

“Regulation Up” has the meaning set forth in the Tariff.

“Reliability Must-Run Contract” or “RMR Contract” has the meaning set forth in the Tariff.

“Repair Plan” has the meaning set forth in Section 8.02(c).

“Representatives” means the officers, directors, employees, legal counsel, accountants, lenders, advisors, or ratings agencies and other agents of a Party utilized in connection with this Agreement and, in the case of SCE, includes the Independent Evaluator.

“Required Permits” has the meaning set forth in Section 5.01(b).

“Required Permit Date” means the date set forth in Section 5.01(b).

“Resource Adequacy” shall have the meaning used in Resource Adequacy Rulings.

“Resource Adequacy Availability Management” or “RAAM” has the meaning set forth in Section 19.05(b).

“Resource Adequacy Benefits” means, with respect to any Storage Unit, any and all of the following, in each case which are attributed to or associated with the Storage Unit at any time throughout the Delivery Period:

- (a) resource adequacy attributes, as may be identified from time to time by the CPUC, CAISO, or other Governmental Authority having jurisdiction, that can be counted toward RAR;
- (b) resource adequacy attributes or other locational attributes for the Storage Unit related to a Local Capacity Area, as may be identified from time to time by the CPUC, CAISO or other Governmental Authority having jurisdiction, associated with the physical location or point of electrical interconnection of the Storage Unit within the CAISO Control Area, that can be counted toward a Local RAR;
- (c) flexible capacity resource adequacy attributes for the Storage Unit, including, without limitation, the amount of Unit EFC as may be identified from time to time by the CPUC, CAISO, or other Governmental Authority having jurisdiction, that can be counted toward Flexible RAR; and

- (d) other current or future defined characteristics, certificates, tags, credits, or accounting constructs, howsoever entitled, including any accounting construct counted toward any RA Compliance Obligations.

“Resource Adequacy Resource” shall have the meaning used in Resource Adequacy Rulings.

“Resource Adequacy Rulings” means CPUC Decisions 04-01-050, 04-10-035, 05-10-042, 06-04-040, 06-06-064, 06-07-031, 07-06-029, 08-06-031, 09-06-028, 10-06-036, 11-06-022, 12-06-025, 13-06-024, and any other existing or subsequent decisions, resolutions, or rulings related to resource adequacy, including, without limitation, the CPUC Filing Guide, in each case as may be amended from time to time by the CPUC.

“Resource ID” has the meaning set forth in the Tariff.

“Resource-Specific Settlement Interval LMP” has the meaning set forth in the Tariff.

“Responsible Officer” means the chief financial officer, treasurer or any assistant treasurer of a Party or any employee of a Party designated by any of the foregoing.

“Retest” has the meaning set forth in Appendix 7, PART II. K.

“Satellite Communications System” or “SCS” means a system provided to Seller by SCE at SCE’s cost for emergency voice communications between SCE and Seller’s operating staff for the Project.

“S&P” means Standard & Poor’s Financial Services LLC, or its successor.

“SC Replacement Date” has the meaning set forth in Section 19.07.

“SC Set-Up Fee” has the meaning set forth in Section 19.01.

“SCE” has the meaning set forth in the preamble.

“SCE Proposed Test Plan” has the meaning set forth in Appendix 7, PART III. A.

“Schedule” means the action of SCE in submitting Bids to the CAISO and receiving all CAISO Markets results from the CAISO.

“Scheduled Energy” means, the Energy from a Storage Unit expected to be delivered during each Settlement Interval to the Energy Delivery Point pursuant to (a) the latest Dispatch Notice, or (b) any CAISO instructions during the Delivery Period, including (i) Supplemental Energy bids or (ii) Ancillary Services exercised. If, in any Settlement Interval, the expected energy normally published by CAISO is unavailable, incomplete, or does not conform to the Operating Restrictions of the Storage Unit, then for settlement purposes for that Settlement Interval only, the Scheduled Energy shall be deemed to be the Delivered Energy. In the case where PMax and Scheduled Energy are greater than the SU Contract Capacity, then for settlement purposes for that Settlement Interval only, the Scheduled Energy shall be deemed to be the SU Contract Capacity.

“Scheduling and Delivery Deviation Administrative Charge” or “SDD Administrative Charge” has the meaning set forth in Section 19.04.

“Scheduling and Delivery Deviation Charge” or “SDD Charge” has the meaning set forth in Section 19.04.

“Scheduling Coordinator” or “SC” means an entity certified by the CAISO for the purposes of undertaking the functions specified in Article Nineteen.

“SDD Admin Price” means any administrative charge applied by the CAISO due to “Uninstructed Imbalance Energy” or successor term as defined in the Tariff.

“SDD Price” means, for each Storage Unit, the applicable Resource-Specific Settlement Interval LMP, *provided*, in no case shall the SDD Price be less than zero (0).

“SEC” means the United States Securities and Exchange Commission.

“Security Interest” has the meaning set forth in Section 13.04.

“Seller” has the meaning set forth in the preamble.

“Seller Initiated Test” has the meaning set forth in Section 7.01(c).

“Seller Proposed Test Plan” has the meaning set forth in Appendix 7, PART III. A.

“Settlement Interval” has the meaning set forth in the Tariff.

“Simple Interest” means the product of the following three factors: (a) dollar amount on which an interest payment is based; (b) Federal Funds Effective Rate; and (c) the number of days in the calculation period divided by 360.

“Site” means the real property on which the Project is, or will be located, as further described in Section 1.02(e) and Appendix 1.02. *[SCE Comment: may require additional description in addition to Appendix 1.02 (e.g., parcel map, legal description)]*

“Site Certification” means the “California Energy Commission Power Facility and Site Certification” set forth in Section 5.01(b).

“Site Control” means that Seller owns the Site and the Project or has demonstrable contractual rights to, or is the managing general partner of any partnership (or comparable manager of any other person) who owns or has demonstrable contractual rights to, with explicit authority to act in all matters relating to, the control and operation of, the Site and the Project.

“SLIC” has the meaning set forth in the Tariff. To the extent this Tariff definition refers to or is applicable to a generation resource, such definition shall apply to the Storage Unit(s) as if the Storage Unit(s) are generation resources.

“Spinning Reserve” has the meaning set forth in the Tariff.

“SP15” means the Existing Zone Generation Trading Hub for Existing Zone region SP15 as set forth in the Tariff.

“Specified RA Replacement Capacity” has the meaning set forth in the Tariff.

“Start-Up” means the action of bringing a Storage Unit from shut down status to synchronization with the grid, attainment of its PMin, and the availability of unconditional release of such Storage Unit ready for ramping to the applicable dispatch instruction. A Start-Up can only result from a Dispatch Notice and is complete once all of the conditions in the preceding sentence are met.

“State of Charge” means the amount of electric energy in a Storage Unit expressed as a percent of the maximum amount of electric energy a Storage Unit is capable of storing (e.g., 80% State of Charge).

“Station Use” means the electrical load of the Project’s auxiliary equipment that are necessary for operation of the Storage Unit(s) as set forth in Section 1.02. The auxiliary equipment includes, but is not limited, to forced and induced draft fans, air conditioner systems, cooling towers, plant lighting, and control systems.

“Station Use Metering Equipment” means, for the Project, a CAISO-approved revenue quality meter or meters, CAISO-approved data processing gateway or remote intelligence gateway, telemetering equipment and data acquisition services sufficient for monitoring, recording and reporting, in real time, all electric energy consumed by the Project for Station Use.

“Storage Capacity” means the maximum amount of energy that is capable of being stored in a storage device, and shall include, without limitation, any other products that may be developed or evolve from time to time during the Term that relate to the capability of a storage resource to store energy.

“Storage Unit” or “Storage Units” means the energy storage unit or units specified in Appendix 1.02.

“Storage Unit Removal Right” means, with respect to any Storage Unit that is subject to Section 8.02(d)(i) or 8.02(e)(i), SCE’s right to designate such affected Storage Unit(s) for removal from this Agreement. Upon Notice of such designation: (i) SCE shall have no obligation to compensate Seller for Product from such Storage Unit(s), (ii) Contract Capacity and Appendices 1.01, 1.02, 9.02, and any other information specific to such Storage Unit(s), shall automatically be amended to reflect the removal of such Storage Unit(s), (iii) Seller shall not be permitted to market, dispatch, store, provide, or convey output from such Storage Unit(s) for SCE or any other third party, (iv) SCE shall calculate, and Seller shall be obligated to pay, a Termination Payment attributable to and associated with the Product from such Storage Unit(s) with SCE being considered the Non-Defaulting Party in all circumstances, and (v) notwithstanding clause (iv), this Agreement will otherwise remain in full force and effect.

“Substitution Costs” has the meaning set forth in Section 19.05(b).

“Substitution Rules” has the meaning set forth in Section 19.05(b).

“Successful Repair” means that, immediately upon completion of the repairs to or, if necessary, replacement of a Storage Unit, Seller demonstrates, at Seller’s expense, to SCE’s reasonable satisfaction, and as applicable, that such Storage Unit has and can:

- (a) with respect to repairs or a replacement associated with Discharging Capacity, (i) Start-Up and ramp up to and remain at full discharge for two (2) consecutive hours, and (ii) immediately thereafter remain available for dispatch under this Agreement by a quantity equal to or greater than ninety-five percent (95%) of SU Contract Capacity for seven (7) consecutive days.
- (b) with respect to repairs or a replacement associated with Charging Capacity, (i) ramp up to and remain at full charge for two (2) consecutive hours, and (ii) immediately thereafter remain available for charging under this Agreement by a quantity equal to or greater than ninety-five percent (95%) of SU Contract Capacity for seven (7) consecutive days.
- (c) with respect to repairs or a replacement associated with Storage Capacity, demonstrate that the Storage Capacity is equal to or greater than ninety-five percent (95%) of the Maximum Storage Level for seven (7) consecutive days.

Only upon the Successful Repair of a Storage Unit will SCE be responsible for Variable O&M Charges and Charging Energy Costs incurred by such Storage Unit to demonstrate a Successful Repair. Until a Successful Repair is demonstrated, any test of the Storage Unit shall be deemed a Seller Initiated Test and the Storage Unit will be deemed unavailable.

“SU Contract Capacity” means the Contract Capacity of a single Storage Unit as set forth in Appendix 1.01.

“Supplemental Energy” is the Energy from the Project that have uncommitted capacity following finalization of the HASP awards and available to the CAISO during the Real Time Market.

“Supply Plan” has the meaning set forth in the Tariff.

“Tariff” means the tariff and protocol provisions, including any current CAISO-published “Operating Procedures” and “Business Practice Manuals,” as amended or supplemented from time to time, of the CAISO.

“Term” has the meaning set forth in Section 2.01.

“Termination Payment” has the meaning set forth in Section 3.04.

“Test” has the meaning set forth in the first paragraph of Appendix 7.

“Test Conditions” has the meaning set forth in Appendix 7, PART II.F.

“Test Parameters” for the Storage Unit(s) are as set forth in Section 1.02(d).

“Test Records” has the meaning set forth in Appendix 7, PART II.I.

“Tie-Line” means the transmission or distribution line between the Energy Delivery Point and the Point of Interconnection as more fully described in Appendix 1.03(a).

“Trading Day” means the day in which Day Ahead trading occurs in accordance with the WECC Prescheduling Calendar.

“Trading Hour” has the meaning set forth in the Tariff.

“Transmission Emergency” means:

- (a) An actual or imminent condition or situation which jeopardizes the integrity of PTO’s electric system or the integrity of any other systems to which the PTO’s electric system is connected, as determined by the PTO in its reasonable discretion, or any condition so defined and declared by the CAISO; or
- (b) An emergency condition as defined under an interconnection agreement and any abnormal interconnection or system condition that requires automatic or immediate manual action to prevent or limit loss of load or generation supply, that could adversely affect the reliability of the PTO’s electric system or generation supply, that could adversely affect the reliability of any interconnected system, or that could otherwise pose a threat to public safety.

“Transmission Owners Tariff” means the tariff setting out a Participating Transmission Owner’s rates and charges for transmission access to the CAISO Grid, filed with the CPUC, as it may be amended or superseded and accepted by the CPUC from time to time, or any successor tariff.

“UDP Implementation” means the date that UDP will be applied to each SC by the CAISO.

“Uninstructed Deviation Penalty” or “UDP” has the meaning set forth in the Tariff.

“Uninstructed Imbalance Energy”, or any successor term, has the meaning set forth in the Tariff. To the extent this Tariff definition refers to or is applicable to a generation resource, such definition shall apply to the Storage Unit(s) as if the Storage Unit(s) are generation resources; *provided*, it shall only apply to the Storage Unit(s)’ ability to discharge energy and for instances where the Storage Unit(s) are discharging energy.

“United States Bankruptcy Code” means 11 U.S.C. §101 *et seq.*, as amended, and any successor statute.

“Unit EFC” means the effective flexible capacity (in MWs) of the applicable Storage Unit pursuant to the counting conventions set forth in the Resource Adequacy Rulings and Tariff, which such flexible capacity may be used to satisfy Flexible RAR.

“Variable O&M Charge” means the applicable rate (\$/MWh) for a Storage Unit as specified in Appendix 9.04.

“Variable O&M Payment” has the meaning set forth in Section 9.04.

“WECC” means the Western Electricity Coordinating Council, or any successor thereto.

“WECC Prescheduling Calendar” has the meaning used on the WECC website at <http://www.wecc.biz>.

“Western LA Basin High Voltage Substations” means the following substations located in the CAISO Control Area: Alamos, Barre, Center, Chevmain, Del Amo, Eagle Rock, El Nido, El Segundo, Ellis, Goodrich, Gould, Hinson, Huntington Beach, Johanna, La Cienega, La Fresa, Laguna Bell, Lewis, Lighthipe, Long Beach, Mesa, Olinda, Redondo, Rio Hondo, Santiago, Viejo, Villa Park, and Walnut.

“Western LA Basin Project” means a storage facility that directly connects to a (i) Western LA Basin High Voltage Substation, or (ii) lower voltage substation that electrically connects to a Western LA Basin High Voltage Substation. *[SCE Note: if applicable]*

“Wholesale Distribution Access Tariff” or “WDAT” means the tariff through which open access transmission service and interconnection service are offered by SCE, as filed with FERC, and as amended or supplemented from time to time, or any successor tariff.

“WMDVBE” means women, minority, and disabled veteran business enterprise, as more particularly set forth in CPUC General Order 156.

APPENDIX 1.01
CAPACITY AND ANCILLARY SERVICES OPERATING RESTRICTIONS

Excel Appendices

APPENDIX 1.02 STORAGE UNITS

Excel Appendices

APPENDIX 1.03(a)
ENERGY DELIVERY POINT

Single-line diagram depicting grid interconnection

APPENDIX 6.01(A) MILESTONE SCHEDULE

– Project Schedule –

Seller has provided dates for development, construction, commissioning, and testing of the Project, showing all significant elements and milestones, as applicable, such as permitting, procurement, financing, engineering, acceptance testing, Seller's proposed Expected Initial Delivery Date, and proposed Delivery Period.

[SCE Comment: This list is illustrative only. Seller to insert project specific list]

Line	Projected Completion Date	Milestone
1		Front End Engineering / Permits / Agreements
2		Submit Applicable Participating Transmission Owner Interconnection Application
3		File a CEC Certification and Verification Application
4		Receive a Completed Interconnection System Impact Study (or equivalent)
5		Receive a Completed Interconnection Facilities Study (or equivalent)
6		Finalize Labor Agreement Negotiations
7		Execute a Participating Transmission Owner Interconnection Agreement
8		Receive FERC Acceptance of Interconnection Agreement and Transmission Agreement(s)
9		Receive CEC Certification and Verification or APCD permit if applicable
10		Obtain Control Of All Lands and Rights-Of-Way Comprising The Site
11		Receive CEC Full Notice To Proceed
12		Receive All Other Required Permits

Line	Projected Completion Date	Milestone
13		Financing
14		Verify That Seller's Bank Has Received All Required Due Diligence Information
15		Complete Bank Financing
16		Engineering
17		Execute EPC Contract
18		Begin Existing Site Re-Engineering
19		Begin New Storage Unit Engineering Design
20		Lump Sum Estimate Preparation
21		Complete Existing Site Re-Engineering
22		Complete New Storage Unit Engineering Design
23		Construction – Initial Site Work
24		Begin Civil Tasks - CTG's
25		Begin Mechanical Tasks - U/G Piping
26		Begin Electrical Tasks - U/G Electrical
27		Construction
28		Begin Construction of the Project - Erect Equipment
29		Civil Tasks - Balance of Plant
30		Mechanical Tasks - A/G Piping
31		Electrical Tasks - A/G Electrical
32		Erect Storage Units
33		Commission Storage Units

Line	Projected Completion Date	Milestone
34		Complete Construction of the Project
35		Commissioning
36		Begin Start-Up Activities - BOP Systems
37		Achieve Initial Operation
38		Demonstrate Contract Capacity
39		Expected Initial Delivery Date

APPENDIX 6.01(B)

CONSTRUCTION REPORT

Monthly Project Progress Report

From the Effective Date and continuing until the Initial Delivery Date, Seller will provide a monthly Project Progress Report containing, at a minimum, the information listed below.

1. An executive summary;
2. Project bar chart schedule (including current status of all events);
3. Assessment of percent construction complete and percent change from immediately previous report;
4. Description of general work status (including short passages as applicable) on:
 - a. Engineering;
 - b. Procurement;
 - c. Permitting (include status of any required regulatory determinations for approval of Federal New Source Review permitting exemptions, expedited permitting processes, and status of acquisition of required ERCs and other emission credits in terms of impact on the Project's permitting schedule, over-all Project schedule, and ability of Project to meet Expected Initial Delivery Date);
 - d. Major construction activities in the prior month;
 - e. Testing;
 - f. Electrical interconnection status; and
 - g. Any other required interconnections.
5. Forecast activities for next month; and
6. Potential issues affecting the Project.

Seller must notify SCE's contract manager for the Agreement in writing of its receipt of any additional documents, which fall into the categories, listed (in a – f) below, and make such documents available to SCE within two (2) Business Days of such receipt:

- a. All material written commitments regarding construction work at the Project that could impact completion schedule or Initial Delivery Date;
- b. Executed work orders for construction of the Project;
- c. Construction agreements;
- d. Letters of intent;
- e. Precedent agreements; and
- f. Engineering assessments of the Project or any Storage Unit.

APPENDIX 7 TESTING PROTOCOLS

INITIAL COMMERCIAL OPERATION and CONTRACT CAPACITY & ANCILLARY SERVICE TESTS

[SCE Note: Protocols will need to be adjusted based on storage process technology]

Storage Unit

This Appendix 7 sets forth the protocols for (i) the Initial Commercial Operation Test that each Storage Unit must successfully complete in order to achieve Commercial Operation and which sets the level of SU Contract Capacity for such Storage Unit, and (ii) the Contract Capacity & Ancillary Services Test. The Initial Commercial Operation Test and the Contract Capacity & Ancillary Services Tests are sometimes referred to in this Appendix individually as a “Test” and jointly as the “Tests.”

PART I. GENERAL.

The Initial Commercial Operation Test and each Contract Capacity & Ancillary Service Test will be conducted in accordance with Prudent Electrical Practices and the provisions of *[SCE Note: TBD based on storage process technology]*.

PART II. REQUIREMENTS APPLICABLE TO ALL TESTS.

- A. Test Elements. The Test shall include the following test elements (unless SCE otherwise agrees in writing in its sole discretion):
- Measurement of each Storage Unit’s electrical output at PMAX;
 - Measurement of each Storage Unit’s electrical output at PMIN;
 - Determine each Storage Unit’s ability to meet its proposed Regulation Ramp Rate;
 - Time required to go from off-line to both PMAX and PMIN;
 - Time and energy required to go from 0% State of Charge to 100% State of Charge;
 - Amount of energy delivered, at PMAX, from 100% State of Charge to 0% State of Charge, beginning immediately after reaching 100% State of Charge;
 - Amount of energy delivered, at PMAX, from 100% State of Charge to 0% State of Charge after 24 hours of static storage time at 100% State of Charge;
 - Amount of energy delivered, at PMIN, from 100% State of Charge to 0% State of Charge, beginning immediately after reaching 100% State of Charge;

- Amount of energy delivered, at PMIN, from 100% State of Charge to 0% State of Charge after 24 hours of static storage time at 100% State of Charge; and
- *[SCE Note: Any other element specific to storage process technology.]*

The test elements shall be used to determine the output, efficiency and *[SCE Note: any other calculated parameters applicable to the particular Storage Unit technology]*.

B. Parameters. During any Test, at a minimum, the following parameters shall be measured and recorded simultaneously for each Storage Unit at least every five (5) minutes:

- (1) instantaneous ambient relative humidity;
- (2) instantaneous ambient barometric pressure (inches Hg) with transmitters located near the horizontal centerline of the Storage Unit;
- (3) instantaneous ambient temperature (°F);
- (4) net electrical energy output to the Energy Delivery Point (kWh);
- (5) charging electrical energy input from the Energy Delivery Point (kWh);
- (6) emissions data required by air permit (if applicable);
- (7) applicable basic process parameters such as: *[SCE Note: TBD based on storage process technology (e.g., working fluid flow, rotational speed, pressure process temperatures (°F), etc)]*

Upon mutual agreement of the Parties, additional parameters may be measured and recorded simultaneously with the required parameters.

C. Test Showing. During each *[SCE Note: TBD based on storage process technology]* period of each Test, Seller must demonstrate to SCE's reasonable satisfaction, that the Storage Unit:

- (1) successfully started in *[SCE Note: TBD based on storage process technology]*;
- (2) operated for at least *[SCE Note: TBD based on storage process technology]* at PMAX;
- (3) shut down at least once without resorting to unusual practices or procedures to ensure that such Storage Unit keeps operating;

- (4) operated for at least *[SCE Note: TBD based on storage process technology]* at its maximum “Power Acceptance” level as set forth in Appendix 1.01;
- (5) has a Storage Capacity of an amount that is, at least, equal to the Maximum Storage Level;
- (6) *[SCE Note: TBD based on storage process technology]*

At least once per Test, the Storage Unit shall also demonstrate its ability to run at PMIN level for one (1) hour and the ability to ramp both upwards and downwards at the rates set forth in Appendix 1.01.

SCE in its sole descretion may elect to shorten the run periods or waive a particular portion of a Test at any time. Such election or waiver during one Test does not shorten any run period or waive any portion of any subsequent Test.

Storage Unit Performance Measurement
Maximum Permissible Deviations¹

[SCE Note: TBD based on storage process technology]

<u>Variable</u>	<u>Permissible Deviation</u>
Energy Input/Output (electrical)	± 2%
Power Factor	± 2%
Rotating Speed	± 2%
Barometric Pressure	±0.5 %
Temperatures	± 4°F
Ambient Inlet Air Pressure	± 0.5%

Note 1 – If using multiple instruments, the average result of all instruments shall be used

- E. Final Test Plan. At all times during a Test, the Storage Unit(s), including all auxillary equipment, shall be operated in compliance with the Final Test Plan, Prudent Electrical Practices and all operating protocols recommended, required or established by the manufacturer for operation at PMAX.
- F. Test Conditions. At all times during a Test, the Storage Unit(s) shall not be operated with abnormal operating conditions such as (i) unstable load conditions; (ii) operation outside of manufacturers recomendations; or (iii) operation outside of regulatory restrictions.

If abnormal operating conditions occur during a Test, SCE may postpone or reschedule all or part of such Test in its reasonable discretion in accordance with PART II.J. or PART II.K., below.

- G. Applicable Laws and Permits. The Storage Unit(s) shall be in compliance with all Applicable Laws and permits, including those governing safety, noise, air and water emissions during any Test.
- H. Emissions. All emissions permit conditions shall be met during any Test. The Storage Unit(s)' validated continuous emission monitoring system, if applicable, must be used according to permit conditions for emissions monitoring required by the applicable Air Pollution Control District as stipulated on the Storage Unit(s)' permit to construct or permit to operate.
- I. Test Records. Seller shall provide all records associated with PART II.A. through C. no later than four (4) Business Days following completion of a Test. The records shall include copies of the raw data taken during the Test. Collectively, the records and data provided under this section shall be "Test Records".
- J. Incomplete Test. If any Test is not completed in accordance herewith, SCE may in its sole discretion: (i) accept the Test results up to the time the Test stopped (other than in the case such Test is an Initial Commercial Operation Test); (ii) require that the portion of the Test not completed, be completed within a reasonable specified time period; or (iii) require that the Test be entirely repeated. Notwithstanding the above, if Seller is unable to complete a Test due to a Seller's Force Majeure or the actions or inactions of SCE or the CAISO, Seller shall be permitted to reconduct such Test as a Seller Initiated Test under Section 7.01 on dates and at times reasonably acceptable to SCE.
- K. Retest. After the successful completion of a Test, Seller has the right, for any reason, to conduct a maximum of two (2) "Retests" at Seller's sole expense including cost of charging the Storage Unit(s). For the avoidance of doubt, the limitation on retesting set forth in the preceding sentence does not apply to any testing of a Storage Unit other than an Initial Commercial Operation Test or Contract Capacity & Ancillary Services Test.

If the written test records provided by Seller to SCE in accordance with PART II.I. are not in accord with the records and notes of the SCE representative who attended such Test on SCE's behalf, SCE may require the Test to be repeated or conducted by SCE or a testing firm of SCE's choice and attended by Seller's representatives at Seller's expense.

The records from any Retest shall be used to determine Storage Unit performance as of the date of the original Test being repeated.

L. Final Report. Within fifteen (15) Business Days after the completion of a Test (including a Retest), Seller shall prepare and submit to SCE a written report of the Test. At a minimum, the report shall include:

- (1) a description of the Final Test Plan;
- (2) a record of the personnel present during all or any part of the Test, whether serving in an operating, testing, monitoring or other such participatory role;
- (3) documentation of the satisfactory completion of the Start-Up and stabilization period;
- (4) a record of any unusual or abnormal conditions or events that occurred during the Test and any actions taken in response thereto;
- (5) the measured Test data;
- (6) The level of Contract Capacity determined by the Test, including supporting calculations; and
- (7) Seller's statement of either Seller's acceptance of the Test or Seller's rejection of the Test results and reason(s) therefore.
- (8) *[SCE Note: TBD based on storage process technology]*

Within ten (10) Business Days after receipt of such report, SCE shall notify Seller in writing of either SCE's acceptance of the Test results or SCE's rejection of the Test and reason(s) therefore.

If SCE rejects the results of any Test or Retest, or Seller rejects the results of the first Initial Commercial Operation Test, such Test shall be repeated in accordance with PART II.K.

M. Operating Personnel. During any Test, the same operating personnel shall operate the Storage Unit(s) that Seller contemplates will operate the Storage Unit(s) during the Delivery Period.

N. SCE Representative. SCE shall be entitled to have at least two (2) representatives from SCE and one (1) independent third party witness present to witness each Test and shall be allowed unrestricted access to the area from where the plant is being controlled (e.g., plant control room), and unrestricted access to inspect the instrumentation necessary for Test data acquisition prior to commencement of any Test. SCE shall be responsible for all costs, expenses and fees payable or reimbursable to the representative and the third party, if any.

PART III. INITIAL COMMERCIAL OPERATION TEST.

- A. Test Plan. No less than sixty (60) days prior to the Expected Initial Delivery Date, Seller shall prepare and submit to SCE a proposed procedure and schedule in order to complete the Initial Commercial Operation Test (“Seller’s Proposed Test Plan”). Such Seller’s Proposed Test Plan must describe, with supporting detail, the actions, processes, protocols, and schedules to comply with all of the requirements in PART II of this Appendix. Within ten (10) Business Days after SCE’s receipt of Seller’s Proposed Test Plan, SCE shall notify Seller that (i) the Seller’s Proposed Test Plan is accepted, and is now considered the Final Test Plan, or (ii) the Seller’s Proposed Test Plan is not accepted. If SCE does not accept Seller’s Proposed Test Plan, then SCE and Seller shall immediately commence work in good faith to develop the Final Test Plan. If, after thirty (30) days from SCE’s receipt of Seller’s Proposed Test Plan, Seller and SCE have not agreed on a Final Test Plan, SCE shall provide Seller with the Final Test Plan within seven (7) Business Days after the expiration of the thirty (30) day period. Failure by SCE to provide Seller with written acceptance of any Seller’s Proposed Test Plan shall not constitute acceptance of such Seller’s Proposed Test Plan.
- B. Instrumentation and Metering. Seller shall provide all instrumentation, metering and data collection equipment required to perform the Initial Commercial Operation Test. Instrumentation shall include all instruments permanently installed at the Storage Unit(s) and the temporary instruments suggested by Seller or deemed necessary by SCE in its sole judgement. Within thirty (30) days of SCE’s receipt of Seller’s Proposed Test Plan, SCE shall provide Seller with written notice of the temporary calibrated instrumentation that will be used during the Initial Commercial Operation Test. Wherever possible, the instrumentation, metering and data collection equipment that will be used after the Storage Unit achieves Commercial Operation for monitoring and controlling the operation of the Storage Unit(s) shall be used for the Initial Commercial Operation Test. Seller shall calibrate or cause to be calibrated all such instrumentation, metering and data collection equipment no more than three (3) months prior to the date of the Initial Commercial Operation Test. All electrical metering equipment shall utilize the Storage Unit(s)’ installed CAISO metering equipment calibrated to CAISO standards. Copies of all calibration sheets shall be provided to SCE at least five (5) Business Days prior to the Initial Commercial Operation Test.
- Permanently installed instruments shall include but not be limited to revenue metering devices located in the switchyard where the Project is located. Whenever possible, data will be accessed through the Storage Unit’s DCS. In addition, Seller shall provide a temporary Data Acquisition System (“DAS”) to monitor all temporary instruments if not recorded in the Storage Unit’s DCS.
- C. Test Duration. The Initial Commercial Operation Test shall take place on three (3) consecutive days unless SCE determines in its sole discretion that more or less time is needed.

- D. Test Dates. Seller shall provide SCE with seven (7) Business Days' Notice of Seller's proposed dates for the Initial Commercial Operation Test. SCE shall confirm the dates in writing prior to the first date of the Test.

Seller may, but is not required to, schedule the Initial Commercial Operation Test to occur during any test performed by or for the EPC Contractor.

- E. Costs. The Initial Commercial Operation Test is a Seller Initiated Test.
- F. Determination of Contract Capacity. The net kW output at the Energy Delivery Point shall be calculated for each of the sixteen (16) consecutive fifteen (15) minute intervals comprising the Test. The average of the sixteen average net kW values is the final SU Contract Capacity for each Storage Unit under Appendix 1.01.

PART IV. CONTRACT CAPACITY & ANCILLARY SERVICES TEST

- A. Test Plan. The Final Test Plan from the Initial Commercial Operation Test shall be used for any Contract Capacity & Ancillary Services Test, unless the Parties agree otherwise in writing.
- B. Instrumentation and Metering. The Parties shall use the same instrumentation and metering as was used in the Initial Commercial Operation Test, unless they otherwise agree in writing.
- C. Test Duration. Each Contract Capacity & Ancillary Services Test shall take place on three (3) consecutive days unless SCE determines in its sole discretion that more or less time is needed.
- D. Test Dates. Seller is responsible for scheduling each Contract Capacity & Ancillary Service Test on three (3) consecutive days (unless SCE determines in its sole discretion that more or less time is needed) that are acceptable to SCE and that fall between June 15 and September 30 of the Contract Year in which the Test is requested. The date of any such Test shall be confirmed in writing by SCE to Seller prior to the date of the Test. The Parties should attempt but are not required to schedule such Test on days that SCE will or is likely to dispatch the Storage Unit.
- E. Costs. Responsibility for costs and allocation of income for a Contract Capacity & Ancillary Service Test is as set forth in Section 7.01.
- F. No Adjustment to Contract Capacity. Notwithstanding any other provision in the agreement, Contract Capacity shall not be adjusted to conform to the results of any Contract Capacity & Ancillary Service Test.

APPENDIX 9.02
MONTHLY CAPACITY PAYMENT

Excel Appendices

APPENDIX 9.04
VARIABLE O&M CHARGE

Excel Appendices

APPENDIX 13.03(b)
LETTER OF CREDIT FORM

IRREVOCABLE NONTRANSFERABLE STANDBY
LETTER OF CREDIT

Reference Number: _____

Transaction Date:

BENEFICIARY:

Southern California Edison Company
2244 Walnut Grove Avenue
Risk Control GO#1, Quad 2A
Rosemead, CA 91770
Attn: Manager Credit, Risk & Collateral Management

Ladies and Gentlemen:

_____ (the "Bank") hereby establishes this Irrevocable Nontransferable Standby Letter of Credit ("Letter of Credit") in favor of Southern California Edison Company, a California corporation (the "Beneficiary"), for the account of [CONTRACT PARTY], a _____ corporation, (the "Applicant"), for the amount of XXX AND XX/100 Dollars (\$ _____) (the "Available Amount"), effective immediately and expiring at 5:00 p.m., California time, on _____ (the "Expiration Date").

This Letter of Credit shall be of no further force or effect upon the close of business on the Expiration Date or, if such day is not a Business Day (as hereinafter defined), on the next Business Day.

For the purposes hereof, "Business Day" shall mean any day on which commercial banks are not authorized or required to close in Los Angeles, California.

Subject to the terms and conditions herein, funds under this Letter of Credit are available to the Beneficiary by presentation in compliance on or prior to 5:00 p.m. California time, on or prior to the Expiration Date, of the following:

1. The original or a photocopy of this Letter of Credit and all amendments; and
2. The Drawing Certificate issued in the form of Attachment A attached hereto and which forms an integral part hereof, duly completed and purportedly bearing the signature of an authorized representative of the Beneficiary.

Notwithstanding the foregoing, any full or partial drawing hereunder may be requested by transmitting the requisite documents as described above to the Bank by facsimile at _____ or such other number as specified from time-to-time by the Bank.

The facsimile transmittal shall be deemed delivered when received. Drawings made by facsimile transmittal are deemed to be the operative instrument without the need of originally signed documents.

Partial drawing of funds shall be permitted under this Letter of Credit, and this Letter of Credit shall remain in full force and effect with respect to any continuing balance; *provided*, the Available Amount shall be reduced by the amount of each such drawing.

This Letter of Credit is not transferable or assignable. Any purported transfer or assignment shall be void and of no force or effect.

Banking charges shall be the sole responsibility of the Applicant.

This Letter of Credit sets forth in full our obligations and such obligations shall not in any way be modified, amended, amplified or limited by reference to any documents, instruments or agreements referred to herein, except only the attachment referred to herein; and any such reference shall not be deemed to incorporate by reference any document, instrument or agreement except for such attachment.

The Bank engages with the Beneficiary that Beneficiary's drafts drawn under and in compliance with the terms of this Letter of Credit will be duly honored if presented to the Bank on or before the Expiration Date.

Except so far as otherwise stated, this Letter of Credit is subject to the International Standby Practices ISP98 (also known as ICC Publication No. 590), or revision currently in effect (the 'ISP'). As to matters not covered by the ISP, the laws of the State of California, without regard to the principles of conflicts of laws thereunder, shall govern all matters with respect to this Letter of Credit.

AUTHORIZED SIGNATURE for Issuer

By:_____

Name:_____

Title:_____

ATTACHMENT A TO APPENDIX 13.03(b)
DRAWING CERTIFICATE
TO [ISSUING BANK NAME]
IRREVOCABLE NONTRANSFERABLE STANDBY LETTER OF CREDIT
Reference Number. _____
(Sample Text)

DRAWING CERTIFICATE

Bank

Bank Address

Subject: Irrevocable Nontransferable Standby Letter of Credit
Reference Number: _____

The undersigned _____, an authorized representative of Southern California Edison Company (the "Beneficiary"), hereby certifies to [Issuing Bank Name] (the "Bank"), and _____ (the "Applicant"), with reference to Irrevocable Nontransferable Standby Letter of Credit No. _____, dated _____, (the "Letter of Credit"), issued by the Bank in favor of the Beneficiary, as follows as of the date hereof:

1. The Beneficiary is entitled to draw under the Letter of Credit an amount equal to \$ _____, for the following reason(s) [check applicable provision]:
 - []A. An Event of Default, as defined in the Energy Storage Agreement between Beneficiary and Applicant (the "Agreement"), with respect to the Applicant has occurred and is continuing. Wherefore, the undersigned does hereby demand payment under the Letter of Credit.
 - []B. An Early Termination Date (as defined in the Agreement) has been set by the Beneficiary under the Agreement. Wherefore, the undersigned does hereby demand payment under the Letter of Credit.
 - []C. The Letter of Credit will expire in fewer than twenty (20) Business Days (as defined in the Agreement) from the date hereof, and Applicant has not provided Beneficiary alternative Performance Assurance (as defined in the Agreement) acceptable to Beneficiary.
 - []D. The Bank or Applicant has heretofore provided written notice to the Beneficiary of the Bank's or Applicant's intent not to renew the Letter of Credit following the present Expiration Date thereof, and Applicant has failed to provide the Beneficiary with a replacement letter of credit satisfactory to Beneficiary in its sole discretion within thirty (30) days following the date of the notice of non-renewal.

[]E. The Beneficiary has not been paid any or all of the Applicant's payment obligations now due and payable under the Agreement.

[]F. Daily Delay Damages (as defined in the Agreement) are now due and payable under the Agreement.

[]G. The Beneficiary is entitled to retain the entire Delivery Date Security (as defined in the Agreement): (i) because the Initial Delivery Date (as defined in the Agreement) has not occurred on or before _____; or (ii) because the Agreement has been terminated due to an Event of Default by Applicant before the Initial Delivery Date.

2. Based upon the foregoing, the Beneficiary hereby makes demand under the Letter of Credit for payment of U.S. DOLLARS AND ____/100ths (U.S.\$ _____), which amount does not exceed (i) the amount set forth in paragraph 1 above, and (ii) the Available Amount under the Letter of Credit as of the date hereof.

3. Funds paid pursuant to the provisions of the Letter of Credit shall be wire-transferred to the Beneficiary in accordance with the following instructions:

Unless otherwise provided herein, capitalized terms which are used and not defined herein shall have the meaning given each such term in the Letter of Credit.

IN WITNESS WHEREOF, this Certificate has been duly executed and delivered on behalf of the Beneficiary by its authorized representative as of this ____ day of _____, _____.

Beneficiary:

SOUTHERN CALIFORNIA EDISON
COMPANY

By:_____

Name:_____

Title:_____

**APPENDIX 20.01
AVAILABILITY NOTICE**

Availability Notice

Operating Day: _____

Station: _____ Issued By: _____

Unit: _____ Issued At: _____

Unit 100% Available No Restrictions: _____

State of Charge: _____

Hour Ending	Available Capacity to Discharge	Available Capacity to Charge	Minimum Output	AGC Available	AGC Min Limit	AGC Max Limit	Storage Capacity Available to Charge	Storage Capacity Available to Discharge	Comments
	(MW)	(MW)	(MW) (non AGC)	YES/NO	(MW)	(MW)	(MWh)	(MWh)	
1:00									
2:00									
3:00									
4:00									
5:00									
6:00									
7:00									
8:00									
9:00									
10:00									
11:00									
12:00									
13:00									
14:00									
15:00									
16:00									
17:00									
18:00									
19:00									
20:00									
21:00									
22:00									
23:00									
0:00									

Comments: _____

**APPENDIX 20.02
DISPATCH NOTICES**

Dispatch Notice

Operating Day: _____

Station: _____ Issued By: _____

Unit: _____ Issued At: _____

Hour Ending	Scheduled Energy	AGC Scheduled	Regulation Up	Regulation Down	Spinning Reserve	Non-Spinning Reserves	Comments
	(MW)	YES/NO	(MW)	(MW)	(MW)	(MW)	
1:00							
2:00							
3:00							
4:00							
5:00							
6:00							
7:00							
8:00							
9:00							
10:00							
11:00							
12:00							
13:00							
14:00							
15:00							
16:00							
17:00							
18:00							
19:00							
20:00							
21:00							
22:00							
23:00							
0:00							

Comments: _____

**APPENDIX 20.03
START-UP NOTICE**

Date _____

Station _____

Unit _____

Issued By: _____

Issued At: _____

Date and Time Start-Up Initiated for
Applicable Storage Unit _____

Date and Time Applicable Generating
Unit Synchronized _____

Date and Time Applicable
Storage Unit Released for Dispatch _____

APPENDIX 20.05 COMMUNICATIONS PROTOCOLS

Communication Protocols

These Communication Protocols are subject to change and shall be modified as evolving market conditions and rules may require.

1. Contacts and Authorized Representatives

The “Contact Information” tables set forth those contact functions, phone/fax numbers and e-mail information by which each Party elects to be contacted by the other. Notification provided under this Agreement shall be made to the applicable point of contact as set forth in the Contact Information Table. A Party may update its Contact Information by providing Notice to the other Party.

2. Communication Protocols – General

2.1 Intra-day Communication: All communications and notices between the Parties that occur intra-day and intra-hour for the applicable Operating Day including those regarding emergencies Dispatch Notices, Availability Notices, and notices to avoid imbalance penalties, uninstructed deviation charges/credits or any other CAISO charges, and **shall be provided electronically or telephonically as SCE directs** to the applicable Party.

If to Seller, such notices and communications shall be provided to the following contact, in order of priority, (1) [REDACTED], (2) [REDACTED], (3) [REDACTED]. If to SCE, such notices and communications shall be provided to Real Time. **Each Party shall confirm all Intra-day Communication either electronically or via telephone as soon as practicable.**

2.2 Communication Failure: In the event of a failure of the primary communication link between Seller and SCE, both Parties will try all available means to communicate, including cell phones or additional communication devices as installed.

2.3 System Emergency: SCE and Seller shall communicate as soon as possible all changes to the schedule requested by the CAISO as a result of a system emergency.

2.4 Confidentiality: Confidential communications between the Parties in discharging their rights and obligations under the Agreement and these Communication Protocols will be subject to the applicable restrictions set forth in the Agreement.

2.5 Staffing: The Parties will have available 24 hours a day, seven days a week, personnel available to communicate regarding the implementation of these Communication Protocols.

Contact Information Table

Contacts and Authorized Representatives for SCE

Outlined below is the contact and communication information for the relevant contact groups. This list may be amended by SCE with timely Notice to Seller.

Contact	Primary Phone	Secondary Phone	Fax	Email
Day-Ahead Trading	626-307-4487		626-307-4430	electrode@sce.com
Day-Ahead Scheduling	626-307-4425	626-307-4420	626-307-4413	presched@sce.com
Real Time	626-307-4453	626-307-4423	626-307-4416	realtime@sce.com
Settlements – Power	626-302-3277		626-302-3276	PPFDPowerSettle@sce.com
Contract Administration				
Outage Scheduling	626-302-3400			genoutages@SCE.com

Contacts and Authorized Representatives for Seller

Outlined below is the contact and communication information for the relevant Seller employees. This list may be amended by Seller with timely Notice to SCE.

Desk:	Contact:	Direct Phone:	Secondary Phones:	Fax	Email:
Dispatch Desk (Day -Ahead)					
Dispatch Desk (Real Time)					
Outage Desk					
Plant Manager					
Contract Administration					
Settlements					
Operations Manager					
Operations Supervisor					

APPENDIX 21.03 DELIVERY OF DATA

The following is a list of generic data points to be electronically exchanged between Seller and SCE in real time. SCE may add items to or delete items from this list at its reasonable discretion prior to the Initial Delivery Date.

Point description	Point description
DNP - XXX UnitX Breaker	UNIT X CONNECTIVITY STATUS
DNP - XXX UnitX AGC CTRL AVAILABILITY ON/OFF	INVERTER X ONLINE STATUS
DNP - ISO RIG Lost Communication	UNITS AUTOMATIC VOLTAGE REGULATION STATUS
DNP - XXX UnitX High Operating Limit	UNITS POWER SYSTEM STABILIZER
DNP - XXX UnitX Low Operating Limit	UNITS GENERATOR MODE (only if modeled as Pump Storage)
DNP - XXX UnitX ISO AGC set point	UNITS PUMP MODE (only if modeled as Pump Storage)
DNP - XXX UnitX Net MW (POD)	UNITS GENERATOR MODE (only if modeled as Pump Storage)
DNP - XXX UnitX Max Sustained Ramp Rate	UNITS PUMP MODE (only if modeled as Pump Storage)
	COMM PORT 2 DATA QUALITY ALARM "INVERTERS"
DNP - XXX UnitX AGC model - ISO AGC	
DNP - XXX UnitX AGC model - SFM	XXX HEARTBEAT
DNP - XXX UnitX AGC model - MAN	UNITS GROSS MW
DNP - XXX UnitX AGC model - OFF	UNITS GROSS MVR
DNP - XXX UnitX Dispatch Energy Schedule	UNITS POINT OF DELIVERY MW
DNP - XXX UnitX Reg Up Awarded MW	UNITS POINT OF DELIVERY MVR
DNP - XXX UnitX Reg Down Awarded MW	UNITS LOW SIDE BUS VOLTAGE
DNP - XXX UnitX Spin Awarded MW	UNIT HIGH OPERATING LIMIT
DNP - XXX UnitX Non-Spin Awarded MW	UNIT LOW OPERATING LIMIT
DNP - XXX UnitX Set Point (MW)	UNIT CONTROL FEEDBACK
DNP - XXX UnitX Ramp Rate (MW/M)	UNIT INSTANTANEOUS ENERGY STORAGE LEVEL
	MAX CHARGE ENERGY
	MAX DISCHARGE ENERGY
	ENERGY CHARGE RAMP RATE MW/min
	ENERGY DISCHARGE RAMP RATE MW/min
	UNITS CHARGING MW
	UNITS DISCHARGING MW

**APPENDIX 22.01
PLANNED OUTAGE REPORT**

Actual Planned Outage Reports submitted under this Agreement should be provided in Excel.

DATE OF UPDATE	
RESOURCE NAME	

Replicate for each Storage Unit


Planned Outages


Start Date	HE	End Date	HE	MW Available

Energy Storage Agreement Excel Appendices Instructions

v.1

Color/Pattern Codes

 Space to type in required Information

 Formula

 Select from a drop-down box

 Data is out of range

SCE Excel Appendices: PPA

	Required Information
Tab Names:	Offers
Instructions	n/a
Front Page	Required
1.01	Required
1.02	Required
2.03	Required
9.02	Required
9.04	Required

Notes:

File should be opened and completed using Excel 2010
Please fill out all data in units requested.

Workbook Instructions

- Complete each worksheet of the entire workbook to the greatest extent possible
- Each Generating Unit or Offer will require a separate workbook (Excel file)

I. Counterparty Identification - "Front Page" tab

- (a) Seller Name – Seller must enter the name of the Counterparty consistent with the name in the "Front Page" tab (Cell A23).
- (b) Generating Unit Name - Seller should create a unique name to identify the Generating Unit offered in these Excel Appendices. The following format should be used: [CP Name] - [Unit Name and Number(s)]
- (c) CAISO Resource ID - To be determined upon delivery period
- (d) File Update Date - Seller should enter the current date in the File Update Date field any time a change is made to the Excel Appendices.
- (e) CPID – SCE will create a Counterparty ID composed of no more than 4 alphanumeric characters (no spaces) and enter the ID on the "Front Page" tab (Cell F33). The same counterparty ID will be used in associated Excel Appendices and Volume Limits spreadsheets
- (f) UNIT ID - SCE will create a Unit ID and enter the ID on the "Front Page" Tab

INDICATIVE OFFER

EXCEL APPENDICES

for

ENERGY STORAGE AGREEMENT

between

SOUTHERN CALIFORNIA EDISON COMPANY

and

Seller

Energy Storage Unit Name:			
CAISO Resource ID:	TBD		
File Update Date:			
CPID:	TBD		
UNIT ID:	TBD		

INDICATIVE OFFER

Offer Name:
Generating Facility Name:

Unit ID:
Offer Number:

Facility Type:
Scheduling Coordinator Selection:

A. CONTRACT TERM

Contract Term Start Date:
Contract Term Length (months):
Contract Term End Date:

B. CONTRACT CAPACITY

Energy Storage Contract Capacity as they will appear in the PPA, Section 1.01.

Month	Expected Monthly RA Capacity (same as Contract Capacity) (MW)	Energy Storage Contract Capacity (MW)
January	0.00	0.00
February	0.00	
March	0.00	
April	0.00	
May	0.00	
June	0.00	
July	0.00	
August	0.00	
September	0.00	
October	0.00	
November	0.00	
December	0.00	

C. POWER PRODUCT PRICES

Please fill out the following table with Capacity Prices as it will appear in the PPA, Section 9.02

Year	Energy Storage Contract Capacity Price (\$/kW-month)
2019	1.00
2020	2.00
2021	1.00
2022	1.00
2023	1.00
2024	
2025	
2026	
2027	
2028	
2029	
2030	
2031	
2032	
2033	
2034	
2035	
2036	
2037	
2038	
2039	

APPENDIX 1.01
CAPACITY AND ANCILLARY SERVICES OPERATING RESTRICTIONS
[Energy Storage Product only]

Technology:

Page Update Date	
Storage Unit Name	

Max Storage Level S_max (MWh):	
Minimum Storage Level S_min (MWh):	
Max Discharge (MW):	
Guaranteed Efficiency Max (GEF^{max})(%):	
Guaranteed Efficiency Min (GEF^{min})(%):	
Time from S_min to S_max (hours):	
Unit Life (Years if applicable):	

				Cycle limitations	Restricted or Unrestricted	If Restricted, Number of Cycles (S _{min} to S _{max})
Power Acceptance vs SOC (State of Charge)	SOC 1	SOC 2	SOC 3	Maximum Daily Cycles		
SOC (% from Smallest to Largest SOC)				Maximum Weekly Cycles		
Power Acceptance (MW)				Maximum Monthly Cycles		
				Maximum Annual Cycles		

[illegible][illegible]

[1] As of the Effective Date, CAISO's MRTU calculates the A/S Maximum Capacity provided by a Storage Unit based on a 10-minute period at the stated Ramp Rate. If during the Delivery Period, CAISO uses a period limitation other than the 10-minute period limitation, the A/S Maximum Capacity for each A/S and region shall be calculated according to (a) CAISO's period limitation while preserving the Ramp Rate stated for each A/S or the (b) range between the minimum A/S capacity and the maximum A/S capacity for such region, whichever is smaller.

Yes
No

INDICATIVE OFFER

APPENDIX 1.02

DESCRIPTION OF STORAGE UNITS

Seller provides the following information:

If information is different for other storage units, please use an additional file.

File Update Date:

Storage Unit Name:

A. Storage Unit Details

Storage Unit:
Site Address:
Existing Zone:

B. Storage Unit Specifications

Storage Unit Technology:
Primary Storage Fuel Type:
Prime Mover Technology:
Configuration:
Rated Power Capacity:

CAISO Resource ID:

Air Pollution Control District:
California Air Resources Board ID #:
Resource Category:

Local area reliability region:
Deliverability restrictions:
Is the Company a WMDVBE¹?

¹ WMDVBE stands for "Women-Owned, Minority-Owned, and Disabled Veteran-Owned Business Enterprise" and has meaning as set forth in CPUC General Order 156.

LA Basin
Big Creek-Ventura

Yes
No

INDICATIVE OFFER

APPENDIX 9.04 VARIABLE O&M CHARGE

Seller provides the following information:

This information is for one storage unit. If information is different for other storage units, please use an additional file.

File Update Date: 1/0/1900

Storage Unit Name:	0
--------------------	---

A. Variable O&M Charge Information

Figures are to be inputted to the one-hundredth level of precision. Please enter all figures to two decimal places.

[illegible]

Appendix B3

Local Capacity Resources *Pro Forma* Behind the Meter Energy Storage Agreement



SOUTHERN CALIFORNIA
EDISON

An *EDISON INTERNATIONAL* Company

2013 LCR RFO PRO FORMA

DEMAND RESPONSE ENERGY STORAGE AGREEMENT

between

[NAME OF SELLER]

and

SOUTHERN CALIFORNIA EDISON COMPANY

Demand Response Energy Storage Agreement

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DEMAND RESPONSE ENERGY STORAGE AGREEMENT
BY AND BETWEEN
[Name of Seller]
SOUTHERN CALIFORNIA EDISON COMPANY

PREAMBLE

This Demand Response Energy Storage Agreement, together with its exhibits (the “Agreement”), is entered into by and between Southern California Edison Company, a California corporation (“SCE”), and *[Seller]*, a *[Seller’s business registration]* (“Seller”), as of *[Date]* (“Execution Date”). SCE and Seller are referred to herein individually as a “Party” and collectively as “Parties.”

RECITALS

This Agreement is made with reference to the following facts, among others:

- A. SCE is an investor-owned electric utility serving customers in central and southern California.
- B. Seller is proposing to construct and own the Project located in *[insert description of location]*, and considered to be within the area described as the *[Western LA Basin or Moorpark Sub-Area]* in CPUC Decision 13-02-015, and, pursuant to the terms of this Agreement, will serve the electrical consumption of *[Western LA Basin Customers or Moorpark Sub-Area Customers]* with the Project.
- C. the Parties wish to enter into this Agreement to provide for the sale by Seller and purchase by SCE of the DR Resource (as defined below).

NOW, THEREFORE, in consideration of these recitals and the agreements contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, agree as follows.

DEFINITIONS

As used in this Agreement, the following terms shall have the meanings set forth below:

“AB 32” means the California Global Warming Act of 2006, Assembly Bill 32 (2006) and the regulations promulgated thereunder (including, without limitation, the GHG Regulations) by any authorized Governmental Body.

“AB 32 Compliance Obligation” has the meaning set forth for “Compliance Obligation” in the GHG Regulations as it relates to Seller.

“Affiliate” means, with respect to a Party, any entity that, directly or indirectly, through one or more intermediaries, controls, or is controlled by, or is under common control with that Party.

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For this purpose, “control” of any entity or person means ownership of a majority of the voting power of the entity or person.

“Agreement” has the meaning set forth in the preamble.

“Applicable Laws” means all constitutions, treaties, laws, ordinances, rules, regulations, interpretations, permits, judgments, decrees, injunctions, writs and orders of any Governmental Body that apply to either or both of the Parties, the Project, the DR Resource or the terms of this Agreement.

“Arbitrator” has the meaning set forth in Section 16.3.

“Average Performing SLAP Hour” has the meaning set forth in Section 7.2(d).

“Bankrupt” means with respect to any entity, such entity (i) files a petition or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause of action under any bankruptcy, insolvency, reorganization or similar law, or has any such petition filed or commenced against it, (ii) makes an assignment or any general arrangement for the benefit of creditors, (iii) otherwise becomes bankrupt or insolvent (however evidenced), (iv) has a liquidator, administrator, receiver, trustee, conservator or similar official appointed with respect to it or any substantial portion of its property or assets, or (v) is generally unable to pay its debts as they fall due.

“Bankruptcy Code” means the United States Bankruptcy Code (11 U.S.C. §101 *et seq.*), as amended, and any successor statute.

“Bundled Service Customer” means a customer of SCE who takes bundled services from SCE including having all its power requirements purchased by SCE.

“Business Day” means a day that is not a Saturday, Sunday, a Federal Reserve Bank holiday, or the Friday immediately following the U.S. Thanksgiving holiday. A Business Day shall open at 8:00 a.m. and close at 5:00 p.m. local time for the relevant Party’s principal place of business. The relevant Party, in each instance unless otherwise specified, shall be the Party from whom the notice, payment or delivery is being sent and by whom the notice or payment or delivery is to be received.

“CAISO” means the California Independent System Operator or any successor entity performing the same functions.

“CAISO Tariff” means the tariff and protocol provisions, including any current CAISO-published “Operating Procedures” and “Business Practice Manuals,” as amended or supplemented from time to time, of the CAISO.

“Capacity Attributes” means, any and all of the following, in each case which are attributed to or associated with the DR Resource and Project at any time throughout the Delivery Period: (i) resource adequacy attributes, as may be identified from time to time by the CPUC, CAISO, or

**DEMAND RESPONSE ENERGY STORAGE AGREEMENT
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[SELLER] AND SOUTHERN CALIFORNIA EDISON COMPANY**

other Governmental Body having jurisdiction, that can be counted toward RAR; (ii) resource adequacy attributes or other locational attributes for the DR Resource and Project related to a Local Capacity Area, as may be identified from time to time by the CPUC, CAISO or other Governmental Body having jurisdiction, associated with the physical location or points of electrical interconnection of the DR Resource and Project within the CAISO Control Area, that can be counted toward a Local RAR; (iii) flexible capacity resource adequacy attributes for the DR Resource and Project, including, without limitation, the amount of Effective Flexible Capacity of the DR Resource and Project, as may be identified from time to time by the CPUC, CAISO, or other Governmental Body having jurisdiction, that can be counted toward Flexible RAR; and (iv) other current or future defined characteristics, certificates, tags, credits, or accounting constructs, howsoever entitled, including any accounting construct counted toward any Compliance Obligations.

“Capacity Rate” has the meaning set forth in Section 1.4(b).

“Cash” means U.S. Dollars held by or on behalf of a Party as Performance Assurance or Delivery Date Security hereunder.

“CEC” means the California Energy Commission, or any successor thereto.

“Claiming Party” has the meaning set forth in Article 20.

“Collateral Assignment Agreement” has the meaning set forth in Article 21.

“Commercial Operation” means that a Storage Unit has successfully completed the demonstration set forth in Appendix 6 as demonstrated by SCE’s acceptance of the test.

“Commission” or “CPUC” means the California Public Utilities Commission, and all divisions thereof, or any successor thereto.

“Compliance Obligations” means the RAR, Local RAR and Flexible RAR.

“Compliance Showings” means the (i) Local RAR compliance or advisory showings (or similar or successor showings), (ii) RAR compliance or advisory showings (or similar or successor showings), and (iii) Flexible RAR compliance or advisory showings (or similar successor showings), in each case, an LSE is required to make to the CPUC (and, to the extent authorized by the CPUC, to the CAISO) pursuant to the CPUC Decisions, to the CAISO pursuant to the CAISO Tariff, or to any Governmental Body having jurisdiction.

“Construction Report” has the meaning set forth in Section 5.1.

“Contract Capacity” has the meaning set forth in Section 1.4(b).

“Control Area” means the electric power system (or combination of electric power systems) under the operational control of the CAISO or any other electric power system under the

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operational control of another organization vested with authority comparable to that of the CAISO.

“CPUC Approval” means a decision of the CPUC that (i) is final and no longer subject to appeal, which approves the Agreement in full and in the form presented on terms and conditions acceptable to SCE in its sole discretion, including without limitation terms and conditions related to cost recovery and cost allocation of amounts paid to Seller under the Agreement; (ii) does not contain conditions or modifications unacceptable to SCE, in SCE’s sole discretion; and (iii) finds that any procurement pursuant to this Agreement satisfies the requirement to procure [preferred resources/energy storage] under Commission Decision 13-02-015.

“CPUC Decisions” means Commission Decisions 04-01-050, 04-10-035, 05-10-042, 06-04-040, 06-06-064, 06-07-031, 07-06-029, 08-06-031, 09-06-028, 10-06-036, 11-06-022, 12-06-025, 13-06-024, and any other existing or subsequent decisions, resolutions, or rulings related to resource adequacy, including, without limitation, the CPUC Filing Guide, in each case as may be amended from time to time by the CPUC.

“CPUC Filing Guide” is the annual document issued by the Commission which sets forth the guidelines, requirements and instructions for LSE’s to demonstrate compliance with the Commission’s resource adequacy program.

“Credit Rating” means, with respect to any entity, the rating then assigned to such entity’s unsecured, senior long-term debt obligations (not supported by third party credit enhancements) or if such entity does not have a rating for its senior unsecured long-term debt, then the rating then assigned to such entity as an issuer rating by the Ratings Agencies.

“Critical Peak Pricing” means the Critical Peak Pricing program as more particularly described on SCE’s Schedule CPP Critical Peak Pricing tariff sheet, Cal. PUC Sheet No. 47305-E, or any successors thereto.

“Customer” means a person or entity that is either a: (i) Bundled Service Customer; or (ii) community choice aggregation customer or direct access customer who would otherwise be eligible to be a Bundled Service Customer.

“Daily Delay Damages” means liquidated damages in the amount of the product of \$123.29/MW and the Contract Capacity for the month with the largest Contract Capacity for each day of delay.

“Delivery Date Security” has the meaning set forth in Section 9.2(a).

“Defaulting Party” has the meaning set forth in Section 11.1.

“Delivered Capacity Payment” has the meaning described in and is calculated pursuant to Section 7.2.

“Delivered Energy Payment” has the meaning described in and is calculated pursuant to Section 7.3.

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“Delivery Days” has the meaning set forth in Section 1.3(x).

“Delivery Hours” has the meaning set forth in Section 1.3(y).

“Delivery Period” has the meaning set forth in Section 1.3.

“Delivery Start Date” has the meaning set forth in Section 1.3.

“DBP” means the Demand Bidding Program as more particularly described on SCE’s Schedule DBP Demand Bidding Program tariff sheet, Cal. PUC Sheet No. 50023-E, or any successors thereto.

“Dispatch” means the act of serving all or a portion of the electrical consumption of the Participating Accounts with the DR Resource pursuant to a Dispatch Instruction. For purposes of this definition, failure to reduce electrical consumption pursuant to a Dispatch Instruction will be considered a Dispatch.

“Dispatch Instruction” means an instruction from SCE pursuant to Section 1.6 directing the Seller to serve all or a portion of the electrical consumption of the Participating Accounts with the DR Resource pursuant to the terms of the Agreement.

“Dispute” means any and all disputes, claims or controversies arising out of, relating to, concerning or pertaining to the terms of this Agreement, or to either Party’s performance or failure of performance under this Agreement.

“DR Resource” means the ability to serve all or portion of the electrical consumption of all or a portion of the Participating Accounts through the use of all or a portion of the Project for an Operating Month pursuant to the terms of this Agreement.

“Dual Participation Programs” means the SCE tariffed demand response programs which at such time permit service accounts in such programs to dual participate as a Participating Account under this Agreement, as such programs are approved, amended, added or removed from being able to dual participate by the Commission from time-to-time. As of July 1, 2013, the Dual Participation Programs consist of the DBP, Critical Peak Pricing, Optional Binding Mandatory Curtailment, and Real-Time Pricing.

“Early Termination Date” has the meaning set forth in Section 11.2(a).

“Effective Flexible Capacity” means the effective flexible capacity or “EFC” of the DR Resource and Project pursuant to the CPUC Decisions and CAISO Tariff, in each case to the extent applicable, and which such flexible capacity may be used to satisfy an LSEs Flexible RAR.

“Energy Baseline” or “EB” means, as more particularly described below, with respect to any particular hour of the day and any particular Participating Account, the average amount of energy consumed by such Participating Account for such particular hour of the day during a

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specified period of time that is used to measure the Participating Account's reduction in energy for such hour after a Dispatch or Seller Dispatch. The Energy Baseline shall be calculated as follows:

For each hour of the day, the EB for a particular hour for an individual Participating Account is the average recorded energy consumption (measured in kWh by the Qualifying Meter) of such Participating Account during such hour for the ten (10) Measurement Days prior to a Seller Dispatch or a Dispatch, as applicable.

Seller must be able to establish a valid EB for each Participating Account. If Seller is unable to establish an EB for a Participating Account, then such Participating Account shall be excluded from the DR Resource.

"Energy Rate" has the meaning set forth in Section 1.4(b).

"Environmental Costs" means costs incurred in connection with acquiring and maintaining all environmental permits and licenses for the Project, and the Project's compliance with all applicable environmental laws, rules and regulations, including capital costs for pollution mitigation or installation of emissions control equipment required to permit or license the Project, all operating and maintenance costs for operation of pollution mitigation or control equipment, costs of permit maintenance fees and emission fees as applicable, and the costs of all emission reduction credits or marketable emission trading credits required by any applicable environmental laws, rules, regulations, and permits to operate, and costs associated with the disposal and clean-up of hazardous substances introduced to the Site, and the decontamination or remediation, on or off the Site, necessitated by the introduction of such hazardous substances on the Site.

"EPC Contract" means Seller's engineering, procurement and construction contract with the EPC Contractor.

"EPC Contractor" means the entity chosen by Seller to perform the engineering, procurement and construction activities for the Project.

"Event of Default" has the meaning set forth in Section 11.1.

"Event Parameters" has the meaning set forth in Section 1.4(a).

"Execution Date" has the meaning set forth in the preamble.

"Expected Initial Delivery Date" has the meaning set forth in Section 3.1(a).

"Federal Funds Effective Rate" means the rate for that day opposite the caption "Federal Funds (effective)" as set forth in the weekly statistical release as H.15(519), or any successor publication, published by the Board of Governors of the Federal Reserve System.

"FERC" means the Federal Energy Regulatory Commission, or any division thereof.

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“Fitch” means Fitch Ratings Ltd. or its successor.

“Flexible RAR” means the resource adequacy flexible capacity requirements established for LSEs by the CPUC pursuant to the CPUC Decisions, the CAISO pursuant to the CAISO Tariff, or by any other Governmental Body having jurisdiction.

“Force Majeure” means an event or circumstance which prevents one Party from performing its obligations under this Agreement, which event or circumstance was not anticipated as of the Execution Date, which is not within the reasonable control of, or the result of the negligence of, the Claiming Party, and which, by the exercise of due diligence, the Claiming Party is unable to overcome or avoid or cause to be avoided. Force Majeure shall not be based on (i) the loss of SCE’s markets; (ii) SCE’s inability economically to use or resell the DR Resource purchased hereunder; (iii) the loss or failure of Seller’s supply; (iv) Seller’s ability to sell the DR Resource at a greater price; (v) a failure of performance of any other entity, except to the extent that such failure was caused by an event that would otherwise qualify as a Force Majeure event; or (vi) breakage or malfunction of equipment, except to the extent that such failure was caused by an event that would otherwise qualify as a Force Majeure event.

“Full-Portfolio Dispatch” means a Dispatch or Seller Dispatch of all Participating Accounts.

“GHG Charges” means any taxes, charges or fees imposed on the Storage Units or Seller by a Governmental Body for Greenhouse Gas emitted by and attributable to the Storage Units during the Delivery Period, but excluding the AB 32 Compliance Obligation.

“GHG Regulations” means Subchapter 10 Climate Change, Article 5, Sections 95800 to 96022, Title 17, California Code of Regulations, as amended or supplemented from time to time.

“Greenhouse Gas” has the meaning set forth in the GHG Regulations.

“Governmental Body” means any federal, state, local, municipal or other government; any governmental, regulatory or administrative agency, commission or other authority lawfully exercising or entitled to exercise any administrative, executive, judicial, legislative, police, regulatory or taxing authority or power; and any court or governmental tribunal.

“Governmental Charge” has the meaning set forth in Section 12.1.

“Hazardous Material” means any substance, waste, or material which has been designated as hazardous or toxic by the United States Environmental Protection Agency, the federal Occupational Safety and Health Administration (“OSHA”), California OSHA, the California Environmental Protection Agency, the California Office of Environmental Health Hazard Assessment, the California Department of Toxic Substances Control, the California State Water Resources Control Board, or any other environmental agency now or subsequently authorized to regulate materials in the environment or workplace.

“Hourly SLAP Recorded Reduction” has the meaning set forth in Section 7.2(f).

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“Indemnified Party” has the meaning set forth in Section 17.3.

“Indemnitor” has the meaning set forth in Section 17.3.

“Industry Standards” has the meaning set forth in Section 8.1(a).

“Inflexible Capacity” means, with respect to any particular Showing Month of the Delivery Period, the number of kW of the DR Resource and Project which are not eligible to satisfy an LSEs Flexible RAR and which are associated kW of the DR Resource and Project that not part of or outside of the Effective Flexible Capacity.

“Initial Commercial Operation Test” means, the testing procedures, requirements, and protocols set forth in Appendix 6.

“Initial Delivery Date” has the meaning set forth in Section 3.1(b).

“Interval Locational Marginal Price” means the interval prices associated with a specific hour as found on the OASIS website (<http://oasis.caiso.com/>).

“JAMS” has the meaning set forth in Section 16.2.

“Lender” means any and all financial institutions that provide to Seller any development, bridge, construction, permanent debt, tax equity, Performance Assurance, Delivery Date Security or other form of financing or refinancing, or other credit support, relating to the Project.

“Letter of Credit” means an irrevocable, nontransferable standby letter of credit, substantially in the form of Appendix 9 and acceptable to SCE, provided by Seller from an issuer acceptable to SCE that is either a U.S. financial institution or a U.S. commercial bank or a U.S. branch of a foreign bank with such financial institution or the bank (i) having a Credit Rating of at least (a) Credit Ratings of at least "A-" by S&P, "A-" by Fitch and "A3" by Moody's, if such entity is rated by the Ratings Agencies; (b) if such entity is rated by only two of the three Ratings Agencies, a Credit Rating from two of the three Ratings Agencies of at least "A-" by S&P, if such entity is rated by S&P, "A-" by Fitch, if such entity is rated by Fitch, and "A3" by Moody's, if such entity is rated by Moody's; or (c) a Credit Rating of at least "A-" by S&P or "A3" by Moody's, or "A-" by Fitch if such entity is rated by only one Ratings Agency; and (ii) having shareholder equity (determined in accordance with generally accepted accounting principles) of at least \$1,000,000,000.00 (ONE BILLION AND 00/100 DOLLARS). Costs of a Letter of Credit shall be borne by the applicant for such Letter of Credit.

“Letter of Credit Default” means with respect to a Letter of Credit, the occurrence of any of the following events: (i) the issuer of such Letter of Credit shall fail to maintain a Credit Rating of at least (A) "A-" by S&P, "A-" by Fitch, and "A3" by Moody's, if such issuer is rated by the Ratings Agencies, (B) "A-" by S&P, , "A-" by Fitch or "A3" by Moody's if such issuer is rated by only two of the Ratings Agencies, or (C) "A-" by S&P, "A-" by Fitch, or "A3" by Moody's, if such issuer is rated by only one Ratings Agency; (ii) the issuer of the Letter of Credit shall fail to comply with or perform its obligations under such Letter of Credit; (iii) the issuer of such Letter

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of Credit shall disaffirm, disclaim, repudiate or reject, in whole or in part, or challenge the validity of, such Letter of Credit; (iv) such Letter of Credit shall expire or terminate, or shall fail or cease to be in full force and effect at any time during the Term of the Agreement, in any such case without replacement; or (v) the issuer of such Letter of Credit shall become Bankrupt; provided, however, that no Letter of Credit Default shall occur or be continuing in any event with respect to a Letter of Credit after the time such Letter of Credit is required to be canceled or returned to a Party in accordance with the terms of this Agreement.

“Load Drop Amount” is the total load drop capacity of a Participating Account by serving such load through the applicable Storage Unit as set for each Participating Account in Section 1.5(a).

“Local Capacity Area” has the meaning set forth in the CAISO Tariff.

“Local RAR” means the local resource adequacy requirements established for LSEs by the Commission pursuant to the CPUC Decisions, the CAISO pursuant to the CAISO Tariff, or by any other Governmental Body having jurisdiction. Local RAR may also be known as local area reliability, local resource adequacy, local resource adequacy procurement requirements, or local capacity requirement in other regulatory proceedings or legislative actions.

“LSE” means load-serving entity.

“Measurement Day” means a twenty-four (24) hour period but excluding weekends, holidays, days in which a Dispatch or Seller Dispatch occurs, and event days under a Dual Participation Program; provided, that event day(s) under DBP will not be considered a Measurement Day only to the extent that a DBP bid, including any standing bid, was placed by the Participating Account on such event day(s).

“Mediator” has the meaning set forth in Section 16.2.

“Merger Event” means, with respect to a Party, that such Party consolidates or amalgamates with, merges into or with, or transfers substantially all its assets to another entity and (i) the resulting entity fails to assume all the obligations of such Party hereunder, or (ii) the resulting entity’s creditworthiness is materially weaker than that of such Party immediately prior to such action. The creditworthiness of the resulting entity shall not be deemed to be ‘materially weaker’ so long as the resulting entity maintains a Credit Rating of at least that of the applicable Party, as the case may be, immediately prior to the consolidation, merger or transfer.

“Milestone Schedule” has the meaning set forth in Section 5.1.

“Moorpark High Voltage Substations” means the following substations located in the CAISO area: Goleta, Moorpark, Santa Clara, Mandalay, and Ormond Beach.

“Moorpark Customer” means a Customer that either (i) directly takes or receives electricity service from a Moorpark High Voltage Substation or (ii) directly takes or receives electricity services from a lower voltage substation that electrically connects to a Moorpark High Voltage Substation.

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“Moody’s” means Moody’s Investor Services, Inc. or its successor.

“NERC Holidays” means “Additional Off-peak Days” as defined by the North American Electric Reliability Corporation on such entity’s website at <http://www.nerc.com>.

“New Resource” means that the Project (a) has a remaining design life of at least [#] years after the Initial Delivery Date as attested by an engineering assessment performed by a professional mechanical engineer (with experience acceptable to SCE in its sole discretion) licensed by the State of California; (b) is incremental capacity to the region of the CAISO’s control area known as SP15; and (c) is for use with a [Western LA Basin Customer or Moorpark Sub-Area Customer].

“Non-Defaulting Party” has the meaning set forth in Section 11.2.

“Notice” means notices, requests, statements or payments provided in accordance with Article 15.

“Operating Months” has the meaning set forth in Section 1.3(z).

“Optional Binding Mandatory Curtailment” means the Optional Binding Mandatory Curtailment program as more particularly described on SCE’s Schedule OBMC Optional Binding Mandatory Curtailment tariff sheet, Cal. PUC Sheet No. 47446-E, or any successors thereto.

“Participating Account” has the meaning set forth in Section 1.5(c).

“Performance Assurance” means the collateral dollar amount as set forth in Section 9.2(c). Performance Assurance must be in the form of Cash or Letter of Credit. Any Cash received and held by a Party after drawing on any Letter of Credit will constitute Performance Assurance in the form of Cash.

“Performing SLAP Hour” has the meaning set forth in Section 7.2(e).

“Permit Requirements” means any requirement or limitation imposed as a condition of a permit or other authorization relating to construction or operation of the Project or related facilities, including limitations on any pollutant emissions levels, limitations on fuel combustion or heat input throughput, limitations on operational levels or operational time, limitations on any specified operating constraint, requirements for acquisition and provision of any emission reduction credits or marketable emission trading credits; or any other operational restriction or specification related to compliance with any Applicable Laws.

“Potential Event of Default” means an event which, with Notice or passage of time or both, would constitute an Event of Default.

“Project” means the Storage Unit and Prevention Equipment together with all materials, equipment systems, structures, features and improvements necessary to store, charge and

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discharge electric energy at the facility, excluding the Site, land rights and interests in land and as more fully described in Appendix 1.8.

“Protective Apparatus” means control devices (such as meters, relays, power circuit breakers and synchronizers) specified in the interconnection agreement or related agreement for the Project.

“Prevention Equipment” has the meaning set forth in Section 4.1(e).

“Procurement Review Group” has the meaning set forth in Article 19.

“Prudent Electrical Practices” means those practices, methods and acts that would be implemented and followed by prudent operators of electric energy storage facilities and demand response resources in the Western United States, similar to the Project and DR Resource, during the relevant time period, which practices, methods and acts, in the exercise of prudent and responsible professional judgment in the light of the facts known or that should reasonably have been known at the time the decision was made, could reasonably have been expected to accomplish the desired result consistent with good business practices, reliability and safety.

Prudent Electrical Practices shall include, at a minimum, those professionally responsible practices, methods and acts described in the preceding sentence that comply with manufacturers’ warranties, restrictions in this Agreement, and the requirements of Governmental Bodies, WECC standards, the CAISO and Applicable Laws.

Prudent Electrical Practices also includes taking reasonable steps to ensure that:

- (a) Equipment, materials, resources, and supplies, including spare parts inventories, are available to meet the needs of the Project and DR Resource;
- (b) Sufficient operating personnel are available at all times and are adequately experienced and trained and licensed as necessary to operate the Project and DR Resource properly and efficiently, and are capable of responding to reasonably foreseeable emergency conditions at the Project, DR Resource and transmission emergencies whether caused by events on or off the Site;
- (c) Preventive, routine, and non-routine maintenance and repairs are performed on a basis that ensures reliable, long term and safe operation of the Project and DR Resource, and are performed by knowledgeable, trained, and experienced personnel utilizing proper equipment and tools;
- (d) Appropriate monitoring and testing are performed to ensure equipment is functioning as designed;
- (e) Equipment is not operated in a reckless manner, in violation of manufacturer’s guidelines or in a manner unsafe to workers, the general public, or the electric system or contrary to environmental laws, permits or regulations or without regard to defined limitations such as, flood conditions, safety inspection requirements, operating voltage, current, volt

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ampere reactive loading, frequency, rotational speed, polarity, synchronization, and control system limits; and

- (f) Equipment and components are designed and manufactured to meet or exceed the standard of durability that is generally used for electric energy storage facilities operating in the Western United States and will function properly over the full range of ambient temperature and weather conditions reasonably expected to occur at the Site and under both normal and emergency conditions.

“Qualified Institution” means either (A) a commercial bank or financial institution (that is not an Affiliate of Seller) organized under the laws of the United States or a political subdivision thereof or (B) a U.S. branch office of a foreign bank, and, with respect to both entities identified in clause (A) and (B), (i) (a) Credit Ratings of at least “A-” by S&P, “A-” by Fitch and “A3” by Moody’s, if such entity is rated by the Ratings Agencies; (b) if such entity is rated by only two of the three Ratings Agencies, a Credit Rating from two of the three Ratings Agencies of at least “A-” by S&P, if such entity is rated by S&P, “A-” by Fitch, if such entity is rated by Fitch, and “A” by Moody’s, if such entity is rated by Moody’s; or (c) a Credit Rating of at least “A-” by S&P or “A3” by Moody’s, or “A-” by Fitch if such entity is rated by only one Ratings Agency, and (ii) having shareholder equity (determined in accordance with GAAP) of at least \$1,000,000,000.00 (ONE BILLION AND 00/100 DOLLARS).

“Qualifying Meter” means an SCE-approved interval meter capable of recording usage in 15 minute intervals and being read remotely by SCE through electronic communication.

“RAR” means the resource adequacy requirements established for LSEs by the Commission pursuant to the CPUC Decisions, the CAISO pursuant to the CAISO Tariff, or by any other Governmental Body having jurisdiction.

“Ratings Agency” means any of S&P, Moody’s, and Fitch (collectively the ‘Ratings Agencies’).

“Real-Time Pricing” means the Real-Time Pricing (RTP-2) program as more particularly described on SCE’s Schedule RTP-2 General Service-Large Real Time Pricing tariff sheet, Cal. PUC Sheet No. 50061-E, or any successors thereto.

“Requested Date Range” has the meaning set forth in Section 7.4.

“Required Permits” has the meaning set forth in Section 4.1(b).

“Required Permit Date” has the meaning set forth in Section 4.1(b).

“Resource Adequacy Benefits” means the rights and privileges attached to the DR Resource and Project that satisfy any person’s or legal entity’s resource adequacy obligations, as those obligations are set forth in any CPUC Decisions, the CAISO Tariff or as determined by another Governmental Body having authority, and shall include any local, zonal, locational, flexibility and other current or future defined characteristics, certificates, tags, credits, or accounting constructs, howsoever entitled, including any accounting construct counted toward resource

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adequacy obligations, including without limitation all Capacity Attributes associated with the DR Resource and Project.

“S&P” means Standard & Poor’s Financial Services LLC, or its successor.

“Safety Report” means a report from an independent engineer (acceptable to both SCE and Seller) certifying that Seller has a written plan for the safe operation and construction (if applicable) of the DR Resource and Project in accordance with Prudent Electrical Practices.

“SCE” has the meaning set forth in the preamble.

“SCE Tariff” means the entire body of effective rates, rentals, charges, and rules, collectively, of SCE, including title page, preliminary statement, rate schedules, rules, sample forms, service area maps, and lists of contracts and deviations, all as may be revised from time-to-time, and which can be found at <http://www.sce.com/AboutSCE/Regulatory/tariffbooks/rules.htm>.

“Seller” has the meaning set forth in the preamble.

“Seller Dispatch” means a Full-Portfolio Dispatch or SLAP Dispatch performed by the Seller in accordance with Section 7.4.

“Settlement Amount” means the required Performance Assurance amount as of the date of the Early Termination Date. The Settlement Amount shall be an amount owing to the Non-Defaulting Party.

“Shortfall Amount” has the meaning set forth in Section 7.3(f).

“Shortfall Energy” has the meaning set forth in Section 7.3(g).

“Showing Month” shall be the calendar month of the Delivery Period that is the subject of the Compliance Showing, as set forth in the CPUC Decisions and outlined in the CAISO Tariff. For illustrative purposes only, pursuant to the CAISO Tariff and CPUC Decisions in effect as of the Execution Date, the monthly Compliance Showing made in June is for the Showing Month of August.

“Simple Interest” means the product of the following three factors: (a) dollar amount on which an interest payment is based; (b) Federal Funds Effective Rate; and (c) the number of days in the calculation period divided by 360.

“Site” means the real property on which the Project is, or will be located, as further described in Section 1.8(b) and Appendix 1.8.

“SLAP Dispatch” means a Dispatch or Seller Dispatch of all Participating Accounts within a particular SLAP.

“SLAP Recorded Reduced Energy” has the meaning set forth in Section 7.3(d).

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“State of Charge” or “SOC” means the amount of electric energy in a Storage Unit expressed as a percent of the maximum amount of electric energy a Storage Unit is capable of storing (e.g., 80% SOC).

“Storage Unit” or “Storage Units” means the energy storage unit or units specified in Appendix 1.8.

“Sub-Load Aggregation Point” or “SLAP” means the geographic location corresponding to each customer service account within the distribution network located within SCE’s service territory as designated by SCE under Section 1.5 herein.

“Term” has the meaning set forth in Section 1.2.

“Term Year” means a twelve (12) month period beginning on the first day of the Delivery Start Date and each successive twelve (12) month period thereafter.

“Termination Payment” means the sum of all amounts owed by the Defaulting Party to the Non-Defaulting Party under this Agreement, less any amounts owed by the Non-Defaulting Party to the Defaulting Party determined as of the Early Termination Date. For clarity, the Settlement Amount is part of and included in the Termination Payment.

“Total Recorded Capacity” has the meaning set forth in Section 7.2(c).

“Transfer” means, with respect to any Performance Assurance, Delivery Date Security or interest amount, and in accordance with the instructions of the Party entitled thereto: (i) in the case of Cash, payment or transfer by wire transfer into one or more bank accounts specified by the recipient; (ii) in the case of Letters of Credit, delivery of the Letter of Credit or an amendment thereto to the recipient.

“WECC” means the Western Electricity Coordinating Council, or any successor thereto.

“West LA Basin High Voltage Substations” means the following substations located in the CAISO area: Alamitos, Barre, Center, Chevmain, Del Amo, Eagle Rock, El Nido, El Segundo, Ellis, Goodrich, Gould, Hinson, Huntington Beach, Johanna, La Cienega, La Fresa, Laguna Bell, Lewis, Lighthipe, Long Beach, Mesa, Olinda, Redondo, Rio Hondo, Santiago, Viejo, Villa Park, and Walnut.

“West LA Basin Customer” means a Customer that either (i) directly takes or receives electricity services from a West LA Basin High Voltage Substation or (ii) directly takes or receives electricity services from a lower voltage substation that electrically connects to a West LA Basin High Voltage Substation.

“WMDVBE” means women, minority, and disabled veteran business enterprise, as more particularly set forth in CPUC General Order 156.

ARTICLE 1. TRANSACTION

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1.1. Purchase and Sale of the DR Resource.

During the Delivery Period, Seller shall deliver and sell, and SCE shall purchase and receive, the DR Resource subject to and in accordance with the terms and conditions of this Agreement.

1.2. Term.

The “Term” of this Agreement shall commence upon the Execution Date and shall continue, unless terminated earlier in accordance with the terms of this Agreement, until the expiration of the Delivery Period.

1.3. Delivery Period.

The “Delivery Period” shall (i) commence on the later of (a) the first day of the first month that begins thirty (30) days after CPUC Approval is obtained and (b) the Initial Delivery Date (the “Delivery Start Date”) and shall continue in full force and effect until *[[DATE] or [11:59 p.m. of the date which is _____ months after the Delivery Start Date]]* unless terminated earlier in accordance with the terms and conditions of this Agreement, and (ii) consist of the Delivery Days, Delivery Hours, and Operating Months during such period of time as set forth below.

- (x) “Delivery Days” means *[Seller bid, Monday through Friday only]*, excluding NERC Holidays.
- (y) “Delivery Hours” means *[Seller bid, Beginning Time HE ## to Ending Time HE ##]*.
- (z) “Operating Months” means *[Seller bid of calendar months during the Delivery Period that contain Contract Capacity as provided in Section 1.4(b) below]*.

1.4. DR Resource.

- (a) The “Event Parameters” for each Sub-Load Aggregation Point are:

Minimum Duration Per Dispatch	Maximum Duration Per Dispatch	Maximum Dispatch Hours Per Day	Maximum Dispatch Hours Per Month	Maximum Dispatch Hours Per Term Year
<i>[Bid]</i>	<i>[Bid]</i>	<i>[Bid]</i>	<i>[Bid]</i>	<i>[Bid]</i>

- (b) The “Energy Rate” shall be *[Bid]* per kilowatt hour (kWh). The “Contract Capacity” and corresponding “Capacity Rate” are as set forth below:

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Month and Year	Contract Capacity (kW)	Capacity Rate (\$/kW-month)
January 20XX		
February 20XX		
March 20XX		
April 20XX		
May 20XX		
June 20XX		
July 20XX		
August 20XX		
September 20XX		
October 20XX		
November 20XX		
December 20XX		

1.5. Participating Accounts.

(a) The following are the “Participating Accounts” under this Agreement:

Name	Service Address	Bundled Service Customer (Y/N)	SCE service account number	SLAP as of the Effective Date	Load Drop Amount (kW)

{SCE Note: A Storage Unit, as described in Appendix 1.8, must correspond to each Participating Account above}

(b) For the entire Delivery Period, each Participating Account identified in Section 1.5(a) shall:

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- (i) have properly executed the disclosure form identified in Section 1.11 below, and have delivered such form to SCE;
 - (ii) not serve under any other demand response program, except for Dual Participation Programs, and if a Participating Account is participating in one of the Dual Participation Programs, Seller shall provide the name(s) of the program(s) in which such Participating Account is participating;
 - (iii) have installed and operating Qualifying Meter; and
 - (iv) be a *[West LA Basin Customer or Moorpark Customer]*.
- (c) No less than ten (10) days before the beginning of each Operating Month, SCE shall identify the SLAP to which each Participating Account belongs; provided, if SCE does not identify a SLAP for a Participating Account pursuant to this Section 1.5(c), then the most recent of either the SLAP identification provided by SCE or the Agreement shall apply. SCE may adjust or modify the SLAP boundaries in accordance with direction SCE receives from the CAISO or Commission.
- (d) Notwithstanding any other provision in this Agreement, SCE is not obligated to make payment for any Contract Capacity or energy associated with a Participating Account that does not meet the requirements of this Agreement.

1.6. Dispatch.

Subject to the limitations set forth in Sections 1.3 and 1.4, SCE may Dispatch the DR Resource by SLAP or as a Full-Portfolio Dispatch through a Dispatch Instruction. The Dispatch Instruction shall be made either telephonically or pursuant to a method determined by SCE in its sole discretion, to the Seller personnel designated to receive such communications as listed in Article 15. In order to be effective, the Dispatch Instruction must be given at least one (1) hour in advance of the start of the Dispatch. Each Dispatch Instruction will be effective unless and until SCE modifies such Dispatch Instruction by providing Seller with an updated Dispatch Instruction at least one (1) hour in advance of the start of the Dispatch. Once Seller has received a proper Dispatch Instruction, Seller shall Dispatch the DR Resource as instructed.

1.7. Exclusive Rights.

During the Delivery Period SCE shall have the exclusive rights to:

- (a) the DR Resource;
- (b) utilize the energy storage capacity from the Project;
- (c) the Contract Capacity from, and the energy benefit derived from, the DR Resource; and

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- (d) all benefits, attributes, credits, emissions reductions, offsets, and allowances, howsoever entitled, derived or attributable from or to the DR Resource, including the exclusive right to use, market or sell the DR Resource, and the benefits provided under Section 10.1, and all revenues created from the use, sale or marketing of the DR Resource and the benefits provided under Section 10.1.

1.8. Storage Units.

- (a) Storage Units' Test Parameters. For purposes of the Initial Commercial Operation Test, the following test parameters ("Test Parameters") shall apply:

[SCE Comment: TBD based on storage technology]

- (b) Location of Site. *[Project Addresses]*, as further described in Appendix 1.8.
- (c) Ownership. Seller shall maintain ownership of and demonstrable exclusive rights to the Project throughout the Term.

1.9. Metering and Communication Equipment.

- (a) Upon SCE's written request, Seller shall install an upgraded Qualifying Meter if upgraded metering and communication equipment are required in order for SCE to monitor and utilize the DR Resource. SCE shall determine the type of metering and communication equipment to be installed.
- (b) For each and every individual Site location, Seller, at its own costs, shall *[SCE Comment: Parties to negotiate mutually acceptable language that requires Seller to install a device, or provide access to information, that indicates whether the Storage Unit(s) at each location are charging or discharging electric energy. For example, such language could require the installation of meters, access to data streams, or some combination thereof. Language shall be based on the specific storage technology and include SCE rights with respect to physical verification and auditing.]*

1.10. Limitation of Liability for Seller Service.

SCE has no obligations to any person or entity that is a Participating Account.

1.11. Release of Customer-Specific Usage or Meter Data.

SCE shall, to the extent available and permitted by Applicable Law, provide specific information, usage, and/or meter data of a Participating Account to Seller, if Seller provides to SCE written authorization from such Participating Account to release such

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information. Such written authorization must be provided in a form acceptable to SCE in its sole discretion. In the event SCE is unable to provide the information contemplated under this section for any reason, Seller shall be responsible for obtaining such information at its sole cost and expense. SCE has no obligation to verify the accuracy of any information provided to Seller hereunder.

ARTICLE 2. CPUC APPROVAL

Notwithstanding anything to the contrary contained in this Agreement, the Delivery Period will not commence until CPUC Approval is obtained.

Within 90 days after the Execution Date, SCE shall file with the Commission the appropriate request for CPUC Approval. SCE shall expeditiously seek CPUC Approval, including promptly responding to any requests for information related to the request for CPUC Approval. Seller shall use commercially reasonable efforts to support SCE in obtaining CPUC Approval. SCE has no obligation to seek rehearing or to appeal a Commission decision which fails to approve this Agreement or which contains findings required for CPUC Approval with conditions or modifications unacceptable to either Party.

Either Party has the right to terminate this Agreement on Notice, which will be effective five (5) Business Days after such Notice is given, if CPUC Approval has not been obtained or waived by SCE in its sole discretion within three hundred sixty-five (365) days after SCE files its request for CPUC Approval and a Notice of termination is given on or before the three hundred ninety-fifth (395th) day after SCE files the request for CPUC Approval.

Failure to obtain CPUC Approval in accordance with this Article 2 will not be deemed to be a failure of Seller to sell or deliver the DR Resource or a failure of SCE to purchase or receive the DR Resource, and will not be or cause an Event of Default by either Party. No Settlement Amount with respect to this Agreement will be due or owing by either Party upon termination of this Agreement due solely to failure to obtain CPUC Approval.

ARTICLE 3. CONDITIONS PRECEDENT

3.1. Expected Initial Delivery Date.

- (a) The Expected Initial Delivery Date for the DR Resource is *[Date]*.
- (b) The "Initial Delivery Date" shall be the first day of the first full month after all of the following conditions have been satisfied for the DR Resource:
 - (i) Seller has completed, to SCE's satisfaction, Seller's obligations set forth in Sections 4.1(a) through 4.1(g), inclusive, in order to bring the Project and the DR Resource into full operation as contemplated by this Agreement;

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- (ii) Each Storage Unit has achieved Commercial Operation;
- (iii) Seller has demonstrated, as part of the Initial Commercial Operation Test and to SCE's reasonable satisfaction, that the Project is capable of meeting the Contract Capacity for all months set forth in Section 1.4(b), and the Event Parameters;
- (iv) Seller has deposited with SCE the applicable Performance Assurance amounts as set forth in Section 9.2(c);
- (v) The applicable Storage Unit is installed at the applicable Participating Account as set forth in Appendix 1.8;
- (vi) Seller has executed and delivered to SCE all documents or instruments required under or requested pursuant to Article Nine;
- (vii) Seller has entered into and complied in all material respects with all obligations, requirements, or agreements needed to interconnect and operate each Storage Unit, including any obligations, requirements, or agreements required under SCE Tariff;
- (viii) Seller has provided SCE with certification from an independent, non-Affiliate California registered professional mechanical engineer, that (i) Seller has designed and built the Project to have a *[SCE Comment: number of years based on technology]* year design life in accordance with Prudent Electrical Practices, and (ii) the design and construction of the Project was carried out by the original equipment manufacturer or other competent organization;
- (ix) Seller has delivered to SCE all insurance documents required under Section 10.3; and
- (x) SCE shall have obtained or waived Final CPUC Approval.

Notwithstanding any other provision in this Agreement, the Initial Delivery Date may not occur prior to the Expected Initial Delivery Date, and the Initial Delivery Date may not be later than *[Insert date that is three hundred sixty-five (365) days after the Expected Initial Delivery Date]*.

3.2. Delayed Initial Delivery Date.

- (a) Daily Delay Damages. If Seller has not satisfied the conditions set forth in Section 3.1 for the Initial Delivery Date of the Project by the Expected Initial Delivery Date, Seller shall owe and pay to SCE the Daily Delay Damages for each day of delay beyond the Expected Initial Delivery Date, up to the number of remaining days until *[Insert date that is three hundred sixty-five (365) days after*

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the Expected Initial Delivery Date]. SCE shall be entitled to recover the Daily Delay Damages owed by Seller by drawing on and/or retaining any Delivery Date Security.

- (b) Delays Due to Force Majeure. Subject to Section 11.1(b)(iii) and Seller's compliance with its obligations as the Claiming Party under Article 20, if Seller has not satisfied the conditions set forth in Section 3.1 for the Initial Delivery Date of the DR Resource by the Expected Initial Delivery Date due to Force Majeure, then the Expected Initial Delivery Date will be extended on a day-for-day basis for the duration of the Force Majeure.

3.3. No Liability of SCE.

SCE shall have no liability to Seller, regardless of cause (including any act or omission of SCE, including as buyer under this Agreement or as the owner of the distribution electrical system) for (a) any delay or failure by Seller to achieve the Initial Delivery Date by the Expected Initial Delivery Date, and (b) any costs or damages incurred by Seller as a result thereof or any reduction in Seller's Delivered Capacity Payments and Delivered Energy Payments resulting from any delay in achieving the Initial Delivery Date by the Expected Initial Delivery Date.

ARTICLE 4. DESIGN AND CONSTRUCTION OF STORAGE UNITS

4.1. Seller's Obligations.

At no cost to SCE, Seller shall:

- (a) Design and construct, or refurbish the Project as required for Seller to perform its obligations under this Agreement;
- (b) Within *[number]* *[#]* days prior to the Expected Initial Delivery Date, Seller shall file all applications or other appropriate requests to acquire and maintain all permits, licenses, certifications and approvals necessary for the construction or refurbishment, operation and maintenance of the Project (the "Required Permits"), including permits to construct from the applicable Air Pollution Control District, or a Facility and Site Certification from the CEC (pursuant to California Public Resources Code Sections 25500-25543), as applicable, and obtain all Required Permits on or before *[Date]* (the "Required Permit Date");
- (c) As applicable, complete all environmental impact assessments or studies conducted by or for Governmental Bodies pursuant to regulatory programs approved and certified under the California Environmental Quality Act, or environmental impact statements or studies conducted pursuant to the National Environmental Policy Act including obtaining public review and certification of any final documents relating to any environmental impact assessment or studies;

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- (d) As required to achieve Commercial Operation for each Storage Unit, furnish and install all Protective Apparatus as SCE reasonably determines to be necessary for proper and safe operation of the Project with SCE's electric system;
- (e) Furnish and install all equipment necessary to prevent, suppress and contain any fire, flooding, explosion, leak of hazardous material or other injury or damage at the Site ("Prevention Equipment");
- (f) Throughout the Delivery Period, maintain all permits, licenses, certifications and approvals necessary for the operation and maintenance of the Project; and
- (g) Provide to SCE, prior to commencement of any construction activities on the Site, a report from an independent engineer (acceptable to both SCE and Seller) certifying that Seller has a written plan for the safe construction and operation of the Project in accordance with Prudent Electrical Practices.

4.2. Changes in Operational Characteristics.

Seller shall provide to SCE Notice of any changes in the operational characteristics of the Project, for SCE's review as far in advance as practicable, but in no event less than thirty (30) days before the changes are to be made. Seller acknowledges that provision of Notice under this Section 4.2 is for SCE's information only and that by receiving such Notice, SCE makes no representation as to the economic or technical feasibility, operational capacity or reliability of any changes in the operational characteristics of the Project.

ARTICLE 5. CONSTRUCTION PERIOD AND MILESTONES

5.1. Milestone Schedule.

In order to meet the Expected Initial Delivery Date, Seller shall use reasonable efforts during the construction period to meet the construction milestones set forth in Appendix 5.1(A) ("Milestone Schedule") and avoid or minimize any delays in meeting such Milestone Schedule. No later than the tenth (10th) day of each month while the DR Resource has not yet met its Initial Delivery Date, or within five (5) days of SCE's request, Seller shall deliver to SCE a monthly progress report, substantially in the form set forth in Appendix 5.1(B) ("Construction Report"), describing its progress in relation to the Milestone Schedule, including projected time to completion of any milestones, for each Storage Unit and the Project. Seller shall include in any Construction Report a list of all letters, notices, applications, approvals, authorizations and filings referring or relating to Required Permits, and shall provide any such documents as may be reasonably requested by SCE. In addition, Seller shall advise SCE, as soon as reasonably

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practicable, of any problems or issues of which Seller is aware which could materially impact its ability to meet the Milestone Schedule.

5.2. Provision of Information.

During the Term, Seller shall promptly provide SCE copies of:

- (a) All agreements with providers of engineering, procurement, or construction services for the Project and all amendments thereto, including any EPC Contract (which may be redacted by Seller to eliminate any portions reasonably believed by Seller to contain confidential information);
- (b) Any reports, studies, or assessments done for Seller by an independent engineer for the Project; and
- (c) No later than twenty (20) days after each semi-annual period ending on June 30th or December 31st, a report listing all WMDVBES that supplied goods or services to Seller during such period, including any certifications or other documentation of such WMDVBES' status as such and the aggregate amount paid to WMDVBES during such period.
 - (i) SCE has the right to disclose to the CPUC all such information provided by Seller pursuant to this Section 5.2(c).
 - (ii) Seller shall make reasonable efforts to accommodate requests by the CPUC (or by SCE in response to a request by the CPUC) to audit Seller in order to verify data provided by Seller pursuant to this Section 5.2(c).

ARTICLE 6. COMMISSIONING AND TESTING

6.1. Initial Commercial Operation Test.

At least thirty (30) days prior to the Expected Initial Delivery Date, Seller shall schedule and complete an Initial Commercial Operation Test for the Project. Such Initial Commercial Operation Test shall be scheduled and conducted in accordance with Appendix 6. Seller shall use commercially reasonable efforts to undertake such activities in sufficient time to achieve Commercial Operation of each Storage Unit by the Expected Initial Delivery Date and SCE will reasonably cooperate with Seller to meet such deadline. Seller shall be responsible for all costs associated with the Initial Commercial Operation Test, including any energy charging costs associated with such test.

6.2. Inspection Rights.

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SCE shall have the right at any time during the Term to enter onto the Site during normal business hours on any Business Day to inspect the Project and otherwise inspect or audit Seller's EPC Contracts and its books and records in order to verify Seller's compliance with the Milestone Schedule and other obligations under this Agreement. Seller shall, or shall cause its EPC Contractors to, provide SCE with access to the Site and all applicable documents and records in order to permit SCE to determine whether:

- (a) Seller has obtained and maintained all Required Permits, and that such Required Permits do not contain Permit Requirements that might restrict SCE's ability to dispatch the DR Resource as provided for in this Agreement; and
- (b) All contracts described in Section 5.2(a) have been entered into and become effective on a timely basis and Seller is not in default thereunder.

ARTICLE 7. PAYMENT AND BILLING

7.1. Invoice.

For each month of the Delivery Period, SCE shall make monthly Delivered Energy Payments and Delivered Capacity Payments in arrears and subject to the following:

- (a) If SCE does not provide a Dispatch Instruction for an Operating Month, Seller shall submit an invoice to SCE no later than ninety (90) days after the end of such Operating Month setting forth Seller's calculation of the Delivered Capacity Payment in accordance with Section 7.2 below.
- (b) If SCE does provide one or more Dispatch Instructions for an Operating Month, Seller shall submit an invoice to SCE no later than one hundred and twenty days (120) days after the end of such Operating Month setting forth Seller's calculation of the Delivered Capacity Payment and Delivered Energy Payment for such Operating Month in accordance with Sections 7.2 and 7.3 below. Such invoice shall include recorded meter data and other performance data and calculations supporting the Delivered Capacity Payment and Delivered Energy Payment Seller claims for such Operating Month.
- (c) SCE will pay Seller all undisputed invoices within ninety (90) days after receipt of Seller's invoice.
- (d) Unless otherwise agreed to in writing by the Parties, payment to Seller will be in the form of a wire transfer.
- (e) SCE may offset against any future payments by any amount(s) that were previously overpaid.

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- (f) Either Party may, in good faith, dispute the correctness of any invoice, bill, charge, or any adjustment to an invoice, rendered under this Agreement, or adjust any invoice for any arithmetic or computational error within twelve (12) months of the date the invoice, bill, charge, or adjustment to an invoice, was rendered. Disputes are subject to the provisions of Article 16 below. In the event an invoice or portion thereof, or any other claim or adjustment arising hereunder, is disputed, payment of the undisputed portion of the invoice shall be required to be made when due, with Notice of the objection given to the other Party. Any invoice dispute or invoice adjustment shall be in writing and shall state the basis for the dispute or adjustment. Payment of the disputed amount shall not be required until the dispute is resolved. Upon resolution of the dispute, any required payment shall be made within thirty (30) Business Days of such resolution. Notwithstanding the timelines in this section, overpayments shall be returned upon request or offset, as appropriate, from future payments.
- (g) SCE may deduct any amounts that would otherwise be due to Seller under this Agreement from any amounts owing and unpaid by Seller to SCE: (i) under this Agreement; or (ii) arising out of or related to any other agreement, tariff, obligation or liability.

7.2. Delivered Capacity Payment.

- (a) Before the first Full-Portfolio Dispatch is performed during the Delivery Period, the Delivered Capacity Payment shall equal the applicable Contract Capacity times the applicable Capacity Rate.
- (b) After the DR Resource has been subjected to a Full-Portfolio Dispatch, Delivered Capacity Payment shall be calculated for each Operating Month as follows:
 - (i) If the Total Recorded Capacity is one hundred percent (100%) of the applicable Contract Capacity or greater, then the Delivered Capacity Payment shall equal the applicable Contract Capacity times the applicable Capacity Rate.
 - (ii) If the Total Recorded Capacity is equal to or greater than ninety percent (90%), but less than one hundred percent (100%) of the applicable Contract Capacity, then the Delivered Capacity Payment shall equal the Total Recorded Capacity times the applicable Capacity Rate.
 - (iii) If the Total Recorded Capacity is equal to or greater than seventy-five percent (75%), but less than ninety percent (90%) of the applicable Contract Capacity, then the Delivered Capacity Payment shall equal the Total Recorded Capacity times fifty percent (50%) of the applicable Capacity Rate.

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- (iv) If the Total Recorded Capacity is less than seventy-five percent (75%) of the applicable Contract Capacity, then the Delivered Capacity Payment shall equal zero dollars (\$0.00).
- (c) The “Total Recorded Capacity” for any particular Operating Month shall equal (i) if a Full Portfolio Dispatch has occurred in such Operating Month, the sum of each SLAP’s Average Performing SLAP Hour for such Operating Month, and (ii) if a Full-Portfolio Dispatch does not occur in such Operating Month, subject to Section 7.2(a), the “Total Recorded Capacity” for such Operating Month shall equal the “Total Recorded Capacity” which was calculated with respect to the most recent Operating Month during which a Full-Portfolio Dispatch occurred.
- (d) The “Average Performing SLAP Hour” equals, with respect to each SLAP, (i) the sum of the Performing SLAP Hours (expressed in kW) for all Full-Portfolio Dispatches and SLAP Dispatches for such SLAP during the applicable Operating Month divided by (ii) the number of Full-Portfolio Dispatches and SLAP Dispatches for such SLAP, in each case which occurred during such Operating Month.
- (e) The “Performing SLAP Hour” means, with respect to each particular SLAP, the hour (expressed in kW) yielding the lowest Hourly SLAP Recorded Reduction from a particular Full-Portfolio Dispatch or SLAP Dispatch during an Operating Month.
- (f) The “Hourly SLAP Recorded Reduction” means:
 - (i) For a Full-Portfolio Dispatch:
 - (A) An Hourly SLAP Recorded Reduction will be calculated for each hour of the Full-Portfolio Dispatch and by SLAP.
 - (B) The Hourly SLAP Recorded Reduction for each hour and SLAP shall be the summation of each Participating Account’s EB in such SLAP for the corresponding hour less its recorded energy, as measured by the Qualifying Meter, for that hour; provided, in no event shall the Hourly SLAP Recorded Reduction for an hour be less than zero (0).
 - (ii) For a SLAP Dispatch:
 - (A) An Hourly SLAP Recorded Reduction will be calculated for each hour of the SLAP Dispatch, and will be applicable only to such SLAP.
 - (B) The Hourly SLAP Recorded Reduction for each hour shall be the summation of each Participating Account’s EB in such SLAP for

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the corresponding hour less its recorded energy, as measured by the Qualifying Meter, for that hour; provided, in no event shall the Hourly SLAP Recorded Reduction for an hour be less than zero (0).

- (iii) For purposes of determining the Hourly SLAP Recorded Reduction and with respect to a Participating Account, should coincident event hours for a Full-Portfolio Dispatch or SLAP Dispatch and a Dual Participation Program occur, then any load reductions calculated during such coincident hours for such Participating Account will be included in the Hourly SLAP Recorded Reduction calculation.

7.3. Delivered Energy Payment.

- (a) Notwithstanding any other provisions in this Agreement, Delivered Energy Payments will be made solely for load reductions for Participating Accounts that are Bundled Service Customers.
- (b) If SCE does not provide a Dispatch Instruction during an Operating Month, then the Delivered Energy Payment shall be zero dollars (\$0.00) for that Operating Month. Seller shall not receive a Delivered Energy Payment for any Seller Dispatch or reduction in load not based on a Dispatch Instruction.
- (c) Delivered Energy Payment shall be calculated as follows:
 - (i) With respect to each Dispatch Instruction given in the Operating Month, a SLAP Recorded Reduced Energy shall be calculated for each SLAP that is the subject of the Dispatch Instruction and where at least one(1) Participating Account that is a Bundled Service Customer is within such SLAP.
 - (ii) For each Operating Month, the Delivered Energy Payment shall equal (a) the sum of all SLAP Recorded Reduced Energy in that Operating Month times the Energy Rate less (B) the sum of all Shortfall Amounts in that Operating Month.
- (d) The “SLAP Recorded Reduced Energy” equals (in kWh), with respect to a particular SLAP, the summation of each Participating Account’s EB that is a Bundled Service Account in that SLAP less its recorded energy, as measured by the Qualifying Meter, for each hour of the Dispatch; provided, that if the SLAP Recorded Reduced Energy for any hour (for purposes of this proviso expressed in kW) for any Participating Account is greater than one percent (100%) of the applicable Load Drop Amount for that Participating Account, then the SLAP Recorded Reduced Energy for such hour and such Participating Account shall be the applicable Load Drop Amount; provided, further, if a SLAP Recorded

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Reduced Energy for any hour (for purposes of this proviso expressed in kW) for any Participating Account is less than one hundred percent (100%) of the applicable Load Drop Amount for that Participating Account, then a Shortfall Amount for that hour, and for all other hours in which the SLAP Recorded Reduced Energy is less than a one hundred percent (100%) of the applicable Load Drop Amount, shall be calculated and subtracted from the Delivered Energy Payment.

- (e) For purposes of determining the SLAP Recorded Reduced Energy and with respect to a Participating Account, should coincident event hours for a Dispatch and Dual Participation Program occur, then any load reductions calculated during such coincident hours for such Participating Account will be included in the SLAP Recorded Reduced Energy calculation.
- (f) “Shortfall Amount” means Shortfall Energy during the applicable hour times the average of each Interval Locational Marginal Price for the SCE DLAP (Node DLAP_SCE-APND) for the corresponding day and hour during which the Shortfall Energy occurred.
- (g) “Shortfall Energy” means (in kWh) the applicable Load Drop Amount less the SLAP Recorded Reduced Energy for that hour. For purposes of this Section 3.3(g), the Load Drop Amount shall be expressed in kWh.

7.4. Seller Dispatch.

Seller may conduct a Full-Portfolio Dispatch or SLAP Dispatch for purposes of adjusting the Total Recorded Capacity in any particular Operating Month; provided:

- (a) Seller must provide advance Notice to SCE of a range of dates during which it requests that the Full-Portfolio Dispatch or SLAP Dispatch occur (the “Requested Date Range”). Each Requested Date Range must be comprised of no less than three (3) consecutive Business Days, and the earliest date must be at least three (3) Business Days after the date such Notice becomes effective.
- (b) Following its receipt of such Notice, SCE will, in its’ sole discretion select the specific timing for such Full Portfolio Dispatch or SLAP Dispatch within such Requested Range, by providing a dispatch instruction to Seller either telephonically or pursuant to a method determined by SCE in its sole discretion, to the Seller personnel designated to receive such communications as listed in Article 15. In order to be effective, such dispatch instruction must be given at least one (1) hour in advance of the start of such Seller Dispatch. Each such dispatch instruction given in accordance with this Section 7.4 will be effective and Seller shall then dispatch the DR Resource as instructed.

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Notwithstanding anything to the contrary in this Agreement, (a) SCE's provision of a dispatch instruction pursuant to this Section 7.4 shall not be considered a "Dispatch" or "Dispatch Instruction" for any purposes under this Agreement, (b) such dispatch shall solely be considered a "Seller Dispatch", (c) Seller is not entitled to receive any Delivered Energy Payments for such a Seller Dispatch, and (d) Seller shall be responsible for all costs associated with a Seller Dispatch, including any energy charging costs associated with such test. The number of hours from such Seller Dispatch will not count towards the Event Parameter limitations, including the maximum available Dispatch hours for a given month or year, as set forth in Section 1.4(a) above.

**ARTICLE 8. SELLER'S OPERATION, MAINTENANCE, AND REPAIR
OBLIGATIONS**

8.1. Seller's Operation Obligations.

- (a) Seller shall operate the Project and DR Resource in accordance with Prudent Electrical Practices, Applicable Laws, Permit Requirements and applicable California utility industry standards, including the standards established by the California Electricity Generation Facilities Standards Committee pursuant to Public Utilities Code Section 761.3, if applicable, and enforced by the CPUC, and CAISO mandated standards, as amended from time to time (collectively, "Industry Standards").
- (b) Seller shall maintain a daily operations log for each Storage Unit which shall include information on charging and discharging (including charging and discharging efficiency), electric energy consumption and efficiency, State of Charge, availability, maintenance performed, outages, changes in operating status, inspections and any other significant events related to the operation of each Storage Unit. In addition, Seller shall maintain all records applicable to each Storage Unit, including the electrical characteristics of the Storage Unit(s) and settings or adjustments of the Storage Unit(s) control equipment (including the power conversion system) and protective devices. Information maintained pursuant to this Section 8.1(b) shall be provided to SCE, within fifteen (15) days of SCE's request.
- (c) Seller shall maintain and provide to SCE, within fifteen (15) days of SCE's request, accurate records with respect to each Storage Unit(s)' Initial Commercial Operation Test.
- (d) Seller shall maintain and make available to SCE and the CPUC, or any division thereof, records including logbooks, demonstrating that the Project is operated and maintained in accordance with Prudent Electrical Practices, Applicable Laws, Permit Requirements and Industry Standards, including CPUC General Order 167, if applicable. Seller shall comply with all reporting requirements and permit

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on-site audits, investigations, tests and inspections permitted or required under any Applicable Laws, Permit Requirements, or Industry Standards.

- (e) Seller shall be responsible for (i) managing, purchasing, charging and transporting each Storage Unit's energy requirements, and (ii) the electric energy costs associated with each Storage Unit, including the cost to charge each Storage Unit.

8.2. Seller's Maintenance and Repair Obligations.

- (a) Seller shall inspect, maintain, and repair the Project and, if necessary, replace, each Storage Unit and Prevention Equipment, and any portion thereof, in accordance with applicable Industry Standards and Prudent Electrical Practices. Seller shall maintain, and deliver to SCE upon request, maintenance and repair records of each Storage Unit.
- (b) Seller shall promptly make all necessary repairs to the Project or, if necessary, replacement of each Storage Unit, and any portion thereof, and take all actions necessary in order to provide the DR Resource to SCE in accordance with the terms of this Agreement.

8.3. Limitations on Charging of Storage Units.

Seller shall not charge any of the Storage Units at any point in time that is within (a) a Delivery Hour that is within a Delivery Day of an Operating Month, or (b) a Delivery Hour that is within a day that could be a Measurement Day, regardless of whether such day is used as a Measurement Day.

ARTICLE 9. CREDIT AND COLLATERAL

9.1. Financial Information.

If requested by one Party, the other Party shall deliver the following financial statements, which in all cases must be for the most recent accounting period and prepared in accordance with GAAP:

- (a) Within one hundred twenty (120) days following the end of each fiscal year, a copy of its annual report containing audited consolidated financial statements (income statement, balance sheet, statement of cash flows and statement of retained earnings and all accompanying notes) for such fiscal year, setting forth in each case in comparative form the figures for the previous year; and
- (b) Within sixty (60) days after the end of each of its first three fiscal quarters of each fiscal year, a copy of its quarterly report containing consolidated financial statements (income statement, balance sheet, statement of cash flows and statement of retained earnings and all accompanying notes) for such fiscal quarter

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and the portion of the fiscal year through the end of such quarter, setting forth in each case in comparative form the figures for the previous year.

In all cases the statements shall be for the most recent accounting period and prepared in accordance with GAAP. In each case, the financial statements specified above must be certified in accordance with all Applicable Laws and regulations, including all applicable SEC rules and regulations, if such Party is an SEC reporting company, or certified by a Responsible Officer as being fairly stated in all material respects (subject to normal year end audit adjustments) if such Party is not an SEC reporting company.

If a Party's financial statements are publicly available electronically on the website of that Party or the SEC, then the Party shall be deemed to have met the requirements of this Section 9.1. Should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default so long as the producing Party diligently pursues the preparation, certification and delivery of the statements.

9.2. Seller's Credit Requirements.

- (a) Credit Requirement After Effective Date. Seller shall post and thereafter maintain delivery date security ("Delivery Date Security") equal to *[SCE Comment: forty-five dollars (\$45) for each kilowatt Contract Capacity for the month with the largest Contract Capacity]*. Seller shall post the Delivery Date Security in accordance with the following terms and conditions:
- (i) Seller shall post one-half of the Delivery Date Security within two (2) Business Days following the Effective Date, with the remainder to be posted within two (2) Business Days after CPUC Approval is obtained or waived by SCE in its sole discretion;
 - (ii) The Delivery Date Security shall be held by SCE as security for Seller's obligation to meet the Expected Initial Delivery Date;
 - (iii) The Delivery Date Security must be in the form of either a Cash deposit or a Letter of Credit;
 - (iv) If Seller posts any Delivery Date Security in Cash, Seller will receive Simple Interest payments in accordance with the procedure specified in Section 9.3(a) of this Agreement; and
 - (v) If Seller provides the Delivery Date Security by means of a Letter of Credit, such Letter of Credit must be provided substantially in the form of Appendix 9.

In the event SCE draws Daily Delay Damages from the Delivery Date Security, Seller shall not be required to replenish the drawn amount.

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- (b) Return of Delivery Date Security. Within five (5) Business Days following the Initial Delivery Date, or upon termination of this Agreement pursuant to Article 2, SCE shall return to Seller the Delivery Date Security, less any Daily Delay Damages SCE has retained if the Initial Delivery Date is after the Expected Initial Delivery Date. If Seller achieves an Initial Delivery Date for the Project by the Expected Initial Delivery Date, SCE shall return to Seller the entire amount of the Delivery Date Security held by SCE.

- (c) Credit Requirements During Delivery Period.

During the Delivery Period, Seller shall post and maintain Performance Assurance in an amount equal to ten percent (10%) of the sum of the estimated Delivered Capacity Payments for the lesser of (x) the current month and all remaining months of the Delivery Period, or (y) the current month and the next thirty-five (35) months, with such estimated Delivered Capacity Payments not being subject to reduction, change or adjustment pursuant to Article 7, or any other provision in this Agreement.

- (i) Performance Assurance must be in the form of either a Cash deposit or a Letter of Credit;
- (ii) Performance Assurance shall be posted to SCE and maintained at all times during the Term and thereafter until such time as Seller has satisfied all monetary obligations which survive any termination of this Agreement;
- (iii) If Seller posts any Performance Assurance in Cash, Seller will receive Simple Interest payments in accordance with the procedure specified in Section 9.3(a) of this Agreement; and
- (iv) If Seller provides Performance Assurance by means of a Letter of Credit, such Letter of Credit must be provided substantially in the form of Appendix 9.

9.3. Administration of Performance Assurance and Delivery Date Security.

- (a) Interest Payments on Cash. Performance Assurance and Delivery Date Security posted in cash shall earn Simple Interest. Seller shall provide a monthly invoice to SCE that sets forth the calculation of the interest amount due and SCE shall make payment thereof by the later of the third (3rd) Business Day (so long as no Event of Default has occurred and is continuing with respect to Seller):

- (i) of the first (1st) month after the month to which the invoice relates; or
- (ii) after the day on which such invoice is received.

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- (b) On or after the occurrence of an Event of Default by Seller, SCE shall retain any such interest amount as additional Performance Assurance or Delivery Date Security hereunder for so long as such Event of Default is continuing or the obligations of Seller under this Agreement have not been satisfied.
- (c) Letters of Credit. Performance Assurance and Delivery Date Security provided in the form of a Letter of Credit shall be substantially in the form set forth in Appendix 9, issued by a Qualified Institution acceptable to SCE, and subject to the following provisions:
 - (i) Each Letter of Credit shall be maintained for the benefit of SCE. Seller shall:
 - (A) renew or cause the renewal of each outstanding Letter of Credit on a timely basis as provided in the relevant Letter of Credit;
 - (B) if the Qualified Institution that issued an outstanding Letter of Credit has indicated its intent not to renew such Letter of Credit, provide a substitute Letter of Credit or alternative Performance Assurance or Delivery Date Security acceptable to SCE at least twenty (20) Business Days prior to the expiration of the outstanding Letter of Credit; and
 - (C) if the Qualified Institution issuing a Letter of Credit fails to honor SCE's properly documented request to draw on an outstanding Letter of Credit, provide a substitute Letter of Credit or alternative Performance Assurance or Delivery Date Security acceptable to SCE, in its sole discretion, within one (1) Business Day after such refusal;

provided, if Seller fails to perform in accordance with (A), (B), or (C) above, Seller shall be deemed to have failed to meet its obligation to provide Performance Assurance or Delivery Date Security.
 - (ii) Upon the occurrence of a Letter of Credit Default, Seller shall provide to SCE either a substitute Letter of Credit or alternative Performance Assurance or Delivery Date Security acceptable to SCE, in each case on or before the first (1st) Business Day after the occurrence thereof (or the fifth (5th) Business Day after the occurrence thereof if only clause (a) under the definition of Letter of Credit Default applies);
 - (iii) Upon, or at any time after SCE has determined that Seller (A) has forfeited all or part of its Delivery Date Security, or (B) owes Daily Delay Damages pursuant to Section 3.2(a), then SCE may draw on any undrawn portion of

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any outstanding Letter of Credit. Cash proceeds received by SCE from drawing upon the Letter of Credit shall be for the account of SCE.

- (iv) Upon, or at any time after, the occurrence and continuation of an Event of Default by Seller, then SCE may draw on the entire undrawn portion of any outstanding Letter of Credit upon submission to the Qualified Institution issuing such Letter of Credit of one or more certificates specifying that such Event of Default has occurred and is continuing. Cash proceeds received by SCE from drawing upon the Letter of Credit shall be deemed Performance Assurance or Delivery Date Security as security for Seller's obligations to SCE and SCE shall have the rights and remedies set forth in this Agreement with respect to such Cash proceeds. Notwithstanding SCE's receipt of Cash proceeds of a drawing under the Letter of Credit, Seller shall remain liable (A) for any failure to provide sufficient Performance Assurance or Delivery Date Security, or (B) for any amounts owing to SCE and remaining unpaid after the application of the amounts so drawn by SCE.
- (v) In all cases, the costs and expenses of establishing, renewing, substituting, canceling, amending and increasing the amount of a Letter of Credit shall be borne by Seller.

9.4. First Priority Security Interest.

To secure Seller's performance of its obligations under this Agreement, and until released as provided herein, Seller hereby grants to SCE a present and continuing first-priority security interest ("Security Interest") in, and lien on (and right of setoff against), and assignment of the Performance Assurance and Delivery Date Security, and any and all proceeds resulting therefrom or the liquidation thereof, whether now or hereafter held by, on behalf of, or for the benefit of SCE, and Seller agrees to take such action as SCE reasonably requires in order to perfect SCE's Security Interest in, and lien on (and right of setoff against), such collateral and any and all proceeds resulting therefrom or from the liquidation thereof. Upon or any time after the occurrence or deemed occurrence and during the continuation of an Event of Default or an Early Termination Date, SCE may do any one or more of the following:

- (a) Exercise any of its rights and remedies with respect to all Performance Assurance and Delivery Date Security, including any such rights and remedies under law then in effect;
- (b) Exercise the right of setoff against any and all property of Seller in SCE's possession;
- (c) Draw on any outstanding Letter of Credit issued for its benefit; and

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- (d) Liquidate all Performance Assurance and Delivery Date Security then held by or for the benefit of SCE free from any claim or right of any nature whatsoever of Seller, including any equity or right of purchase or redemption by Seller.
- (e) SCE shall apply the proceeds of the collateral realized upon the exercise of any such rights or remedies to reduce Seller's obligations under this Agreement (Seller remaining liable for any amounts owing to SCE after such application), subject to SCE's obligation to return any surplus proceeds remaining after such obligations are satisfied in full.

9.5. Uniform Commercial Code Waiver.

This Agreement sets forth the entirety of the agreement of the Parties regarding credit, collateral, financial assurances and adequate assurances. Except as expressly set forth in this Agreement, including, but not limited to, those provisions set forth in Article Nine and Article Eleven, neither Party:

- (a) has or will have any obligation to post margin, provide letters of credit, pay deposits, make any other prepayments or provide any other financial assurances, in any form whatsoever, or
- (b) will have reasonable grounds for insecurity with respect to the creditworthiness of a Party that is complying with the relevant provisions of Article Nine and Article Eleven of this Agreement; and all implied rights relating to financial assurances arising from Section 2-609 of the Uniform Commercial Code or case law applying similar doctrines, are hereby waived.

ARTICLE 10. SPECIAL TERMS AND CONDITIONS

10.1. Resource Adequacy Benefits.

- (a) Seller grants, pledges, assigns, and otherwise commits to SCE the full Contract Capacity of the DR Resource and all Resource Adequacy Benefits associated with the DR Resource and Project in order for SCE to meet its Compliance Obligations. The Parties shall take all actions (including amending this Agreement and complying with all current and future CAISO Tariff provisions and decisions of the Commission, CAISO, and or any other Governmental Body that address resource adequacy performance obligations and penalties), and execute all documents or instruments necessary, to effect the use of the Resource Adequacy Benefits of the DR Resource and Project for SCE's sole benefit throughout the Delivery Period.
- (b) In the event that SCE is required to report any of the information described in the following subsections (i) or (ii) pursuant to the CAISO Tariff, the CPUC

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Decisions or any Applicable Law, SCE will inform Seller of such fact and thereafter:

- (i) If the DR Resource or Project will not be available to provide the full amount of Resource Adequacy Benefits associated with the Contract Capacity or not be able to provide flexible Capacity Attributes equal to the Effective Flexible Capacity in each case for any Compliance Showing during the Delivery Period, Seller shall, no later than the earlier of (y) twenty (20) Business Days after the loss of any Contract Capacity, or (z) fifteen (15) Business Days before the relevant deadlines for such Compliance Showing, notify SCE of the amount of capacity of the DR Resource or Project which can be included in such Compliance Showing; and
- (ii) In the event the DR Resource will not be able to provide flexible Capacity Attributes equal to the Effective Flexible Capacity for any Compliance Showing, Seller agrees to notify SCE of the amount of Inflexible Capacity which may be included in such Compliance Showing.

10.2. Measurement and Evaluation of the DR Resource

Seller agrees, to (a) allow SCE, the Commission, and/or the CEC, and the authorized representatives of such entities, reasonable access to Seller's and the Participating Account's facilities to conduct measurement and evaluation activities related to this Agreement; and (b) participate in and complete all evaluation surveys received from SCE, the Commission and/or the CEC related to this Agreement.

10.3. Insurance Requirements.

Throughout the Term and for such additional periods as may be specified below, Seller shall, at its own expense, provide and maintain in effect the insurance policies and minimum limits of coverage specified below, and such additional coverage as may be required by Applicable Law, with insurance companies which are authorized to do business in the state in which the services are to be performed and which have an A.M. Best's Insurance Rating of not less than A-VII. The minimum insurance requirements specified herein do not in any way limit or relieve Seller of any obligation assumed elsewhere in this Agreement, including, but not limited to, Seller's defense and indemnity obligations.

- (a) Workers' Compensation Insurance with the statutory limits required by the state having jurisdiction over Seller's employees;
- (b) Employer's Liability Insurance with limits of not less than:
 - (i) Bodily injury by accident – One Million dollars (\$1,000,000) each accident

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- (ii) Bodily injury by disease – One Million dollars (\$1,000,000) policy limit
- (iii) Bodily injury by disease – One Million dollars (\$1,000,000) each employee
- (c) Commercial General Liability Insurance (which, except with the prior written consent of SCE and subject to Sections 10.3(c)(i) and (ii) below, shall be written on an “occurrence,” not a “claims-made” basis), covering all operations by or on behalf of Seller arising out of or connected with this Agreement, including coverage for bodily injury, broad form property damage, personal and advertising injury, products/completed operations, and contractual liability. Such insurance shall bear a combined single limit per occurrence and annual aggregate of not less than *[TBD (or) \$1,000,000, per occurrence and \$2,000,000 annual aggregate]*, exclusive of defense costs, for all coverages. Such insurance shall contain standard cross-liability and severability of interest provisions and no explosion, collapse, or underground exclusions.

If Seller elects, with SCE’s written concurrence, to use a “claims made” form of Commercial General Liability Insurance, then the following additional requirements apply:

- (i) The retroactive date of the policy must be prior to the Effective Date; and
- (ii) Either the coverage must be maintained for a period of not less than three (3) years after the Agreement terminates, or the policy must provide for a supplemental extended reporting period of not less than three (3) years after this Agreement terminates.
- (d) Commercial Automobile Liability Insurance covering bodily injury and property damage with a combined single limit of not less than One Million dollars (\$1,000,000) per occurrence. Such insurance shall cover liability arising out of Seller’s use of all owned (if any), non-owned and hired automobiles in the performance of the Agreement.
- (e) Pollution Liability Insurance, (which, except with the prior written consent of SCE and subject to Sections 10.3(e)(i) and (ii) below, shall be written on an “occurrence,” not a “claims-made” basis) with limits of not less than *[TBD (or) \$5,000,000, per occurrence or each claim and in the annual aggregate]*, covering losses involving hazardous material(s) and caused by pollution incidents or conditions that arise from the Project, including but not limited to, coverage for bodily injury, sickness, disease, mental anguish or shock sustained by any person, including death, property damage including the resulting loss of use thereof, clean-up costs, and the loss of use of tangible property that has not been physically damaged or destroyed, and defense costs.

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If Seller elects, with SCE's written concurrence, to use a "claims made" form of Pollution Liability Insurance, then the following additional requirements apply:

- (i) The retroactive date of the policy must be prior to the Effective Date; and
 - (ii) Either the coverage must be maintained for a period of not less than three (3) years after this Agreement terminates, or the policy must provide for a supplemental extended reporting period of not less than three (3) years after this Agreement terminates.
- (f) Umbrella/Excess Liability Insurance, written on an "occurrence," not a "claims-made" basis, providing coverage excess of the underlying Employer's Liability, Commercial General Liability, Pollution Liability Insurance, and Commercial Automobile Liability insurance, on terms at least as broad as the underlying coverage, with limits of not less than *[TBD (or) \$10,000,000, per occurrence and in the annual aggregate]* per occurrence and in the annual aggregate. The insurance requirements of this Section 10.3 can be provided by any combination of Seller's primary and excess liability policies.
- (g) SCE as Insured. The insurance required in Section 10.3 shall apply as primary insurance to, without a right of contribution from, any other insurance maintained by or afforded to SCE, its subsidiaries and affiliates, and their respective officers, directors, shareholders, agents, and employees, regardless of any conflicting provision in Seller's policies to the contrary. To the extent permitted by law, Seller and its insurers shall be required to waive all rights of recovery from or subrogation against SCE, its subsidiaries and affiliates, and their respective officers, directors, shareholders, agents, employees and insurers. The Commercial General Liability, Pollution Liability and Umbrella/Excess Liability insurance required above shall name SCE, its subsidiaries and affiliates, and their respective officers, directors, shareholders, agents and employees, as additional insureds for liability arising out of Seller's obligations under this Agreement.
- (h) Certificates of Insurance. At the time this Agreement is executed, or within a reasonable time thereafter, and within a reasonable time after coverage is renewed or replaced, Seller shall furnish to SCE certificates of insurance evidencing the coverage required above, written on forms and with deductibles reasonably acceptable to SCE. All deductibles, co-insurance and self-insured retentions applicable to the insurance above shall be paid by Seller. All certificates of insurance shall note that the insurers issuing coverage shall endeavor to provide SCE with at least thirty (30) days' prior written notice in the event of cancellation of coverage. SCE's receipt of certificates that do not comply with the requirements stated herein, or Seller's failure to provide certificates, shall not limit or relieve Seller of the duties and responsibility of maintaining insurance in compliance with the requirements in this Section 10.3 and shall not constitute a waiver of any of the requirements in this Section 10.3.

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- (i) Failure to Comply. If Seller fails to comply with any of the provisions of this Section 10.3, Seller, among other things and without restricting SCE's remedies under the law or otherwise, shall, at its own cost and expense, act as an insurer and provide insurance in accordance with the terms and conditions above. With respect to the required Commercial General Liability, Pollution Liability, Umbrella/Excess Liability and Commercial Automobile Liability insurance, Seller shall provide a current, full and complete defense to SCE, its subsidiaries and affiliates, and their respective officers, directors, shareholders, agents, employees, assigns, and successors in interest, in response to a third party claim in the same manner that an insurer would have, had the insurance been maintained in accordance with the terms and conditions set forth above.

10.4. Interconnection.

Seller represents and warrants that, as of the Effective Date, Seller has provided SCE with true and correct, up-to-date copies of all documents related to the interconnection of the Storage Units. Seller shall be responsible for all fees and costs associated with the following:

- (a) Obtaining all interconnection studies;
- (b) Maintaining, complying with and performing Seller's obligations under the interconnection agreement and related documents throughout the Delivery Period;
- (c) any interconnection facilities that are installed for the purpose of interconnecting the Project with existing distribution systems; and
- (d) All costs arising from, relating to or associated with any interconnection agreement between Seller and SCE.

ARTICLE 11. EVENTS OF DEFAULT; TERMINATION

11.1. Events of Default.

An "Event of Default" shall mean, with respect to a Party ("Defaulting Party"), the occurrence of any of the following:

- (a) With respect to either Party:
 - (i) The failure to make, when due, any payment required to be made to the other Party pursuant to this Agreement, if such failure is not remedied within three (3) Business Days after written Notice of such failure is given by the Non-Defaulting Party;

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- (ii) Any representation or warranty made by such Party herein is false or misleading in any material respect when made or when deemed made or repeated if the representation or warranty is continuing in nature;
 - (iii) The failure to perform any material covenant, obligation, term or condition of this Agreement (except to the extent constituting a separate Event of Default), where such breach is not remedied within five (5) Business Days of Notice of such breach by the Non-Defaulting Party;
 - (iv) such Party becomes Bankrupt;
 - (v) a Merger Event occurs with respect to such Party; or
 - (vi) such Party disaffirms, disclaims, or rejects, in whole or in part, or challenges the validity of this Agreement.
- (b) With respect to Seller:
- (i) Seller fails to comply with its obligations under Article Nine, including failing to post or maintain the Delivery Date Security or applicable Performance Assurance, within three (3) Business Days after receipt of Notice by SCE of the failure;
 - (ii) Seller fails to comply with any of its covenants under Section 13.2, unless such failure to comply is cured within a period specifically provided elsewhere in this Agreement applicable to such failure to comply;
 - (iii) Seller fails to achieve the Initial Delivery Date for the Project by *[Date that is three hundred sixty-five days after the Expected Initial Delivery Date]*, whether due to Force Majeure or otherwise;
 - (iv) By the Required Permit Date, Seller fails to obtain all of the Required Permits, or all applicable appeal periods for such approvals or permits have not expired;
 - (v) Except as permitted under Article 21, Seller does not own or otherwise have control of the Project;
 - (vi) Seller fails to comply with its obligations under Section 8.2 with respect to the Prevention Equipment;
 - (vii) Seller charges any Storage Unit in violation of Section 8.3;
 - (viii) During the Delivery Period, the measured Total Recorded Capacity is less than or equal to fifty percent (50%) of the applicable Contract Capacity for three consecutive months;

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- (ix) Seller removes from the Site equipment upon which the Contract Capacity or capacity of the Storage Unit(s) has been based, except for the purposes of replacement, refurbishment, repair or maintenance, and the equipment is not returned within five (5) Business Days after Notice from SCE;
- (x) During the Term, Seller makes any material misrepresentation or omission in any report required to be made or furnished by Seller pursuant to this Agreement;
- (xi) The stock, equity ownership interest in Seller or assets of Seller is directly or indirectly pledged or assigned, or caused or permitted to be pledged or assigned, as collateral to any party other than to Lender without SCE's prior written consent, which consent may be granted or withheld in SCE's reasonable discretion;
- (xii) Seller fails to take any actions necessary to dedicate, convey or effectuate the use of any and all Resource Adequacy Benefits for SCE's sole benefit as specified under Section 10.1;
- (xiii) A termination of, or cessation of service under, any agreement necessary for Seller to (A) interconnect the Project to SCE's distribution electric system, (B) charge or discharge the Project, or (C) comply with the SCE Tariff; *provided*, if termination of, or cessation of service under, any such agreement is not due to the fault of Seller, Seller shall have ten (10) days from such termination or cessation to cure such default;
- (xiv) during the Delivery Period, Seller sells, assigns, or otherwise transfers, or commits to sell, assign, or otherwise transfer, the DR Resource or the capacity of the Storage Units, or any portion thereof, to any party other than SCE without SCE's written consent; or
- (xv) Subject to the terms of a Collateral Assignment Agreement, the occurrence and continuation of a default, event of default or other similar condition or event under one or more agreements or instruments relating to indebtedness for borrowed money, which results in the indebtedness becoming, or becoming capable at such time of being declared, immediately due and payable.

11.2. Early Termination.

If an Event of Default shall have occurred, the Party taking the default (the "Non-Defaulting Party") has the right:

- (a) To designate by Notice, which will be effective five (5) Business Days after the Notice is given, a day, no later than twenty (20) calendar days after the Notice is

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effective, for the early termination of this Agreement (an “Early Termination Date”);

- (b) Withhold any payments due to the Defaulting Party under this Agreement;
- (c) Suspend performance of this Agreement, but excluding the obligation to post and maintain Performance Assurance and Delivery Date Security in accordance with Article 9; and
- (d) To pursue all remedies available at law or in equity against the Defaulting Party (including monetary damages), except to the extent that such remedies are limited by the terms of this Agreement.

11.3. Termination Payment.

As soon as practicable after an Early Termination Date is declared, the Non-Defaulting Party shall provide Notice to the Defaulting Party of the Termination Payment.

The Notice must include a written statement setting forth, in reasonable detail, the calculation of such Termination Payment including the Settlement Amount, together with appropriate supporting documentation.

If the Termination Payment is positive, the Defaulting Party shall pay such amount to the Non-Defaulting Party within two (2) Business Days after the Notice is provided. If the Termination Payment is negative (i.e., the Non-Defaulting Party owes the Defaulting Party more than the Defaulting Party owes the Non-Defaulting Party), then the Non-Defaulting Party shall pay such amount to the Defaulting Party within thirty (30) days after the Notice is provided.

The Parties shall negotiate in good faith to resolve any disputes regarding the calculation of the Termination Payment. Any disputes which the Parties are unable to resolve through negotiation may be submitted for resolution through mediation and arbitration as provided in Article 16.

11.4. Right of Set-Off.

After calculation of a Termination Payment in accordance with Section 11.3, if the Defaulting Party would be owed the Termination Payment, the Non-Defaulting Party shall be entitled, at its option and in its discretion, to set off against such Termination Payment any amounts due and owing by the Defaulting Party to the Non-Defaulting Party under any other agreements, instruments or undertakings between the Defaulting Party and the Non-Defaulting Party. The remedy provided for in this section shall be without prejudice and in addition to any right of setoff, combination of accounts, lien or other right to which any Party is at any time otherwise entitled (whether by operation of law, contract or otherwise).

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11.5. Suspension of Performance.

Notwithstanding any other provision of this Agreement, if (a) an Event of Default or (b) a Potential Event of Default shall have occurred and be continuing, the Non-Defaulting Party, upon Notice to the Defaulting Party, shall have the right (i) to suspend performance under this Agreement and (ii) to the extent an Event of Default shall have occurred and be continuing to exercise any remedy available at law or in equity.

11.6. Limitation on Seller's Ability to Make or Agree to Third Party Sales from the Project/Storage Units after Early Termination Date.

If the Agreement is terminated by SCE prior to the Initial Delivery Date due to Seller's Event of Default, neither Seller nor Seller's Affiliates may sell, market or deliver any energy, capacity, demand response resource, Resource Adequacy Benefits or ancillary services associated with or attributable to a Storage Unit or the Project to a party other than SCE for a period of two (2) years following the Early Termination Date due to Seller's Event of Default, unless prior to selling, marketing or delivering such products, or entering into the agreement to sell, market or deliver such products to a party other than SCE, Seller or Seller's Affiliates provides SCE with a written offer to sell the energy, capacity, demand response resource, Resource Adequacy Benefits or Ancillary Services which provides SCE the right to select in its sole discretion either the terms and conditions materially similar to the terms and conditions contained in this Agreement (including price) or the terms and conditions to which the third party agreed, and SCE fails to accept such offer within forty-five (45) days of SCE's receipt thereof.

Neither Seller nor Seller's Affiliates may sell or transfer the Project, or any part thereof, so long as the limitations contained in this Section 11.6 apply, unless the transferee agrees to be bound by the terms set forth in this Section 11.6 pursuant to a written agreement approved by SCE.

Seller shall indemnify and hold SCE harmless from all benefits lost and other damages sustained by SCE as a result of any breach by Seller of its covenants contained within this Section 11.6.

ARTICLE 12. GOVERNMENTAL AND ENVIRONMENTAL CHARGES

12.1. Governmental Charges.

Seller shall pay or cause to be paid all taxes, charges or fees imposed by a Governmental Body ("Governmental Charges") on or with respect to the DR Resource. If SCE is required by Applicable Laws to remit or pay Governmental Charges which are Seller's responsibility hereunder, SCE may deduct the amount of any such Governmental Charge from any amounts due to Seller under this Agreement. Nothing shall obligate or cause a Party to pay or be liable to pay any Governmental Charges for which it is exempt under Applicable Laws.

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12.2. Compliance with Laws and Indemnification.

Seller shall be responsible for obtaining and maintaining all Required Permits, and shall construct and operate the Project in compliance with all Applicable Laws and Permit Requirements for the Term, including any new or revised Required Permits or Applicable Laws that become effective during the Term. Seller shall be solely responsible for any fines, penalties or other charges which result from Seller's failure to obtain or maintain such Required Permits and/or operate the Project in accordance with Applicable Laws and Permit Requirements. No such fines, penalties or charges shall be passed through to SCE and Seller shall indemnify, defend and hold SCE harmless from and against all liabilities, damages, claims, losses, costs or expenses (including attorneys' fees) incurred by or brought against SCE in connection with all Required Permits and compliance with Applicable Laws and Permit Requirements.

12.3. Environmental Costs and Indemnification.

Seller is solely responsible for all Environmental Costs, all GHG Charges, any AB 32 Compliance Obligation, and all other costs associated with the implementation and regulation of Greenhouse Gas emissions (whether in accordance with AB 32 or any other federal, state or local legislation to offset or reduce any Greenhouse Gas emissions implemented and regulated by an authorized Governmental Body) with respect to the Project and/or Seller, if applicable. Seller shall indemnify, defend and hold Buyer harmless from and against all liabilities, damages, claims, losses, costs and/or expenses (including, without limitation, attorneys' fees) incurred by or brought against Buyer in connection with such Environmental Costs, GHG Charges, AB 32 Compliance Obligation, and other such costs.

ARTICLE 13. REPRESENTATIONS, WARRANTIES AND COVENANTS

13.1. Representations and Warranties of Both Parties.

On the Execution Date, each Party represents and warrants to the other Party that:

- (a) It is duly organized, validly existing and in good standing under the laws of the jurisdiction of its formation;
- (b) Except for CPUC Approval in the case of SCE, it has or will timely acquire all regulatory authorizations necessary for it to legally perform its obligations under this Agreement;
- (c) The execution, delivery and performance of this Agreement are within its powers, have been duly authorized by all necessary action and do not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any law, rule, regulation, order or the like applicable to it;

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- (d) This Agreement constitutes its legally valid and binding obligation, enforceable against it in accordance with its terms;
- (e) It is not Bankrupt and there are not proceedings pending or being contemplated by it or, to its knowledge, threatened against it which would result in it being or become Bankrupt;
- (f) There is not pending or, to its knowledge, threatened against it, any legal proceedings that could materially adversely affect its ability to perform its obligations under this Agreement;
- (g) It (i) is acting for its own account, (ii) has made its own independent decision to enter into this Agreement and as to whether this Agreement is appropriate or proper for it based upon its own judgment, (iii) is not relying upon the advice or recommendations of the other Party in so doing, and (iv) is capable of assessing the merits of and understanding, and understands and accepts, the terms, conditions, and risks of this Agreement; and
- (h) It has entered into this Agreement in connection with the conduct of its business and it has the capability or ability to make available or take delivery of, as applicable, the DR Resource under this Agreement in accordance with the terms of this Agreement.

13.2. Additional Seller Representations, Warranties and Covenants.

- (a) Seller represents and warrants to SCE that:
 - (i) As of the Effective Date, to the best of Seller's knowledge, each specification and description of each Storage Unit and the Project is true and correct.
 - (ii) As of the Initial Delivery Date, the Project is a New Resource.
- (b) On each day on which Performance Assurance and Delivery Date Security is held by SCE under this Agreement, the Seller hereby represents and warrants that:
 - (i) the Seller has good title to and is the sole owner of such Performance Assurance and Delivery Date Security, and the execution, delivery and performance of the covenants and agreements of this Agreement, do not result in the creation or imposition of any lien or security interest upon any of its assets or properties, including, without limitation, the Performance Assurance and Delivery Date Security, other than the security interests and liens created under this Agreement;
 - (ii) upon the Transfer of Performance Assurance and Delivery Date Security by the Seller to SCE, SCE shall have a valid and perfected first priority

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continuing security interest therein, free of any liens, claims or encumbrances, except those liens, security interests, claims or encumbrances arising by operation of law that are given priority over a perfected security interest; and

- (iii) it is not and will not become a party to or otherwise be bound by any agreement, other than this Agreement, which restricts in any manner the rights of any present or future holder of any of the Performance Assurance and Delivery Date Security with respect hereto.
- (c) Seller hereby covenants to SCE that throughout the Term:
- (i) Seller will deliver the DR Resource to SCE free and clear of all liens, security interests, claims and encumbrances or any interest therein or thereto by any person;
 - (ii) Seller will not sell, assign or otherwise transfer the DR Resource or the capacity of the Project, or any portion thereof, to any third party other than to SCE pursuant to this Agreement;
 - (iii) Seller will not use, grant, pledge, assign, or otherwise commit any Contract Capacity of the DR Resource or capacity of the Project to meet the RAR, Flexible RAR or Local RAR of, or confer Resource Adequacy Benefits upon, any entity other than SCE during the Delivery Period;
 - (iv) Seller will use and follow Prudent Electrical Practices;
 - (v) Seller has been appointed by each Participating Account, to act as an aggregator on behalf of said Participating Account with respect to all aspects of the DR Resource, including but not limited to: (A) the receipt of Notices from SCE; (B) the receipt of capacity and energy payments from SCE; and (C) the payment of penalties to SCE;
 - (vi) Seller will deliver a Safety Report to SCE no later than thirty (30) days prior to the start of the Delivery Period;
 - (vii) For each Participating Account, Seller shall have the right to install and operate the applicable Storage Unit at the Participating Account's location in a manner necessary to perform its obligations under this Agreement.
 - (viii) Seller shall maintain and preserve its existence as a *[insert applicable corporate incorporation information]* formed under the laws of the State of *[XX]* and all material rights, privileges and franchises necessary or desirable to enable it to perform its obligations under this Agreement;

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- (ix) Seller shall, from time to time as requested by SCE, execute, acknowledge, record, register, deliver and/or file all such notices, statements, instruments and other documents as may be necessary or advisable to render fully valid and enforceable under all Applicable Laws the rights, liens and priorities of SCE with respect to its Security Interest furnished pursuant to this Agreement;
- (x) Seller shall ensure that no less than twenty percent (20%) of Seller's aggregate costs to complete the initial development, engineering, procurement and construction of the Project are funded by equity contributions to Seller. The amount funded by equity contributions shall not be less than **[TBD]**. The foregoing shall not impose any obligations that survive the Initial Delivery Date, provided that if SCE determines after the Initial Delivery Date that Seller breached this obligation with respect to any time prior to the Initial Delivery Date, SCE retains all rights under this Agreement, including, without limitation under Article 11, with respect to such occurrence;
- (xi) Seller shall provide and execute all documents and instruments reasonably necessary (including documents amending this Agreement in ways not materially adverse to Seller and documents reflecting compliance with all applicable tariff provisions and applicable decisions of the CPUC and/or any other Governmental Body that address resource adequacy performance obligations and penalties hereunder) to effect the use of the Resource Adequacy Benefits of the DR Resource and Project for SCE's sole benefit through the Delivery Period;
- (xii) Seller shall obtain, maintain and remain in compliance with all permits, and interconnection agreements necessary to operate the Project, and charge and discharge the Storage Units;
- (xiii) Except for (i) liens for the benefit of Lender, and (ii) liens cured or removed within thirty (30) days after their incurrence, Seller shall not create, incur, assume or suffer to be created by it or any subcontractor, employee, laborer, materialman, other supplier of goods or services or any other person any lien on Seller's interest in the Site, the Project, or any part thereof or interest therein. Seller shall pay or discharge, or shall cause its contractors to promptly pay and discharge, and discharge of record, any such lien for labor, materials, supplies or other obligations upon Seller's interest in the Site, the Project, or any part thereof or interest therein, unless Seller is disputing any such lien in good faith and only for so long as it does not create an imminent risk of a sale or transfer of the Site, the Project or a material part thereof or interest therein. Seller shall promptly notify SCE of any attachment or imposition of any lien against Seller's interest in the Site, the Project, or any part thereof or interest therein; and

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- (xiv) Seller shall not hold any material assets, become liable for any material obligations or engage in any material business activities other than directly associated with the development, construction and operation of the Project.

ARTICLE 14. RECORDS

14.1. Performance Under this Agreement.

Each Party and its representatives shall maintain records and supporting documentation relating to this Agreement, the Project, and the performance of the Parties hereunder in accordance with, and for the applicable time periods required by, all Applicable Laws, but in no event less than four (4) years after final payment is made under this Agreement.

14.2. Other Regulatory and Governmental Requirements.

At SCE's request, Seller shall maintain and deliver to SCE copies of records and supporting documentation with respect to the Project that Seller is not already required to maintain or deliver under this Agreement, in order to comply with all Applicable Laws.

14.3. Audit Rights.

SCE and the Commission shall have the right, at its sole expense and during normal working hours, to audit the documents, records or data of Seller to the extent reasonably necessary to verify the accuracy of any statement, claim, charge or calculation made pursuant to this Agreement. Seller shall have the right, at its sole expense, to hire an independent third party reasonably acceptable to SCE to audit the documents, records or data of SCE related to this Agreement during normal working hours to the extent reasonably necessary to verify the accuracy of any statement, claim, charge or calculation made pursuant to this Agreement. Such independent third party must sign a confidentiality agreement in substance reasonably acceptable to SCE before examining SCE's documents, records or data. Each Party shall promptly comply with any reasonable request by the other Party under this Section 14.3 and provide copies of documents, records or data to the requesting Party. The rights and obligations under this Section 14.3 shall survive the termination of this Agreement for a period of two (2) years.

14.4. California Climate Action Registry.

If applicable, in accordance with CPUC Rulemaking 06-04-009, upon modification of the protocols of the California Climate Action Registry to allow energy storage (as applicable) facility-specific registration, Seller shall promptly (i) register with the California Climate Action Registry, (ii) send SCE Notice of such registration and (iii) remain a member of the California Climate Action Registry throughout the entire Term.

ARTICLE 15. NOTICES

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15.1. Notices.

Notices, requests, statements or payments from one Party to the other Party shall be made to the addresses and persons specified in Section 15.2. All Notices, requests, statements or payments from one Party to the other Party shall be made in writing except (a) Dispatch Instructions, which can be provided in the manner described in Section 1.6 and (b) where this Agreement expressly provides that Notice may be made by telephone. Notices required to be in writing shall be delivered by hand delivery, overnight delivery, or facsimile. Notice from one Party to the other Party by facsimile (where confirmation of successful transmission is received) shall be deemed to have been received on the day on which it was transmitted (unless transmitted after 5:00 p.m. at the place of receipt or on a day that is not a Business Day, in which case it shall be deemed received on the next Business Day). Notice from one Party to the other Party by hand delivery or overnight delivery shall be deemed to have been received when delivered. Notice from one Party to the other Party by telephone shall be deemed to have been received at the time the call is received. All Notices by telephone required to be provided by one Party to the other pursuant to this Agreement, may be given by recorded telephone conversation between an authorized representative of the Party delivering the Notice and an authorized representative of the other Party. Each Party hereby consents to the recording of its authorized representatives' telephone conversations in connection with the giving of any Notices by telephone pursuant to and in accordance with this Agreement. All recordings may be introduced into evidence and used to prove the content and sufficiency of the Notice. A Party may change its contact information by providing Notice of the same in accordance herewith.

15.2. Contact Information.

For SCE:

Billing Representative

Power Procurement – Finance
Phone: (626) 302-3277

Contract Representative

Mgr of Power Contracts
Phone: (626) 302-3727

Preschedule Contact

Mgr of Energy Operations
Phone: (626) 302-5730

Real Time Trading

Phone: (626) 307-4453
Facsimile: (626) 302-3409

Day Ahead Trading

Phone: (626) 307-4487
Facsimile: (626) 302-3409

Day Ahead Scheduling

Phone: (626) 307-4420
Facsimile: (626) 302-3409

Real Time Scheduling

Phone: (626) 307-4405
Facsimile: (626) 302-3409

Settlements

Phone: (626) 302-0999
Facsimile: (626) 302-6132

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Other SCE Contact Information

Real-time Phone: 626-302-3380

Wire Transfer

BNK: JPMorganChase Bank

ABA: 021000021

ACCT: 323-394434

Credit and Collections

Attn: Manager of Credit

Phone: (626) 302-1129

Facsimile: (626) 302-2517

Notices of Event of Default or Potential Event of Default to:

Director and Managing Attorney
Power Procurement Section, SCE Law Department
Phone:
Facsimile:

For Seller:

Billing Representative

[Name]

Phone:

Facsimile:

Contract Representative

[Name]

Phone:

Facsimile:

Preschedule Contact

[Name]

Phone:

Facsimile:

Real Time Trading

[Name]

Phone:

Facsimile:

Day Ahead Trading

[Name]

Phone:

Facsimile:

Day Ahead Scheduling

[Name]

Phone:

Facsimile:

Real Time Scheduling

[Name]

Phone:

Facsimile:

Settlements

[Name]

Phone:

Facsimile:

Other Seller Contact Information

Wire Transfer

Credit and Collections

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BNK:	Attn:
ABA:	Phone:
ACCT:	Facsimile:

Notices of Event of Default or Potential Event of Default to:
[Name]
 Phone:
 Facsimile:

The Parties acknowledge and agree that those persons set forth in this Section 15.2 are designated by each Party as their respective authorized representatives to act on their behalf for the purposes described therein.

ARTICLE 16. DISPUTE RESOLUTION

16.1. Dispute Resolution.

Other than requests for provisional relief under Section 16.4, any and all Disputes which the Parties have been unable to resolve by informal methods after undertaking a good faith effort to do so, must first be submitted to mediation under the procedures described in Section 16.2 below, and if the matter is not resolved through mediation, then for final and binding arbitration under the procedures described in Section 16.3 below.

The Parties waive any right to a jury and agree that there will be no interlocutory appellate relief (such as writs) available. Any Dispute resolution process pursuant to this Article 16 shall be commenced within one (1) year of the date of the occurrence of the facts giving rise to the Dispute, without regard to the date such facts are discovered; provided, if the facts giving rise to the Dispute were not reasonably capable of being discovered at the time of their occurrence, then such one (1) year period shall commence on the earliest date that such facts were reasonably capable of being discovered. If the Dispute resolution process pursuant to Article 16 with respect to a Dispute is not commenced within such one (1) year time period, such Dispute shall be barred, without regard to any other limitations period set forth by law or statute.

16.2. Mediation.

Either Party may initiate mediation by providing Notice to the other Party in accordance with Article 15 of a written request for mediation, setting forth a description of the Dispute and the relief requested.

The Parties will cooperate with one another in selecting the mediator ("Mediator") from the panel of neutrals from Judicial Arbitration and Mediation Services, Inc. ("JAMS"), its

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successor, or any other mutually acceptable non-JAMS Mediator, and in scheduling the time and place of the mediation.

Such selection and scheduling will be completed within forty-five (45) days after Notice of the request for mediation.

Unless otherwise agreed to by the Parties, the mediation will not be scheduled for a date that is greater than one hundred twenty (120) days from the date of Notice of the request for mediation.

The Parties covenant that they will participate in the mediation in good faith, and that they will share equally in its costs (other than each Party's individual attorneys' fees and costs related to the Party's participation in the mediation, which fees and costs will be borne by such Party).

All offers, promises, conduct and statements, whether oral or written, made in connection with or during the mediation by either of the Parties, their agents, representatives, employees, experts and attorneys, and by the Mediator or any of the Mediator's agents, representatives and employees, will not be subject to discovery and will be confidential, privileged and inadmissible for any purpose, including impeachment, in any arbitration or other proceeding between or involving the Parties, or either of them, provided, evidence that is otherwise admissible or discoverable will not be rendered inadmissible or non-discoverable as a result of its use in the mediation.

16.3. Arbitration.

Either Party may initiate binding arbitration with respect to the matters first submitted to mediation by providing Notice in accordance with Article 15 of a demand for binding arbitration before a single, neutral arbitrator (the "Arbitrator") within sixty (60) days following the unsuccessful conclusion of the mediation provided for in Section 16.2, above. If Notice of arbitration is not provided by either Party within sixty (60) days following the unsuccessful conclusion of the mediation provided for in Section 16.2 above, the Dispute resolution process shall be deemed complete and further resolution of such Dispute shall be barred, without regard to any other limitations period set forth by law or statute.

The Parties will cooperate with one another in selecting the Arbitrator within sixty (60) days after Notice of the demand for arbitration and will further cooperate in scheduling the arbitration to commence no later than one hundred eighty (180) days from the date of Notice of the demand.

If, notwithstanding their good faith efforts, the Parties are unable to agree upon a mutually-acceptable Arbitrator, the Arbitrator will be appointed as provided for in California Code of Civil Procedure Section 1281.6.

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To be qualified as an Arbitrator, each candidate must be a retired judge of a trial court of any state or federal court, or retired justice of any appellate or supreme court.

Unless otherwise agreed to by the Parties, the individual acting as the Mediator will be disqualified from serving as the Arbitrator in the dispute, although the Arbitrator may be another member of the JAMS panel of neutrals or such other panel of neutrals from which the Parties have agreed to select the Mediator.

Upon Notice of a Party's demand for binding arbitration, such Dispute submitted to arbitration, including the determination of the scope or applicability of this agreement to arbitrate, will be determined by binding arbitration before the Arbitrator, in accordance with the laws of the State of California, without regard to principles of conflicts of laws.

Except as provided for herein, the arbitration will be conducted by the Arbitrator in accordance with the rules and procedures for arbitration of complex business disputes for the organization with which the Arbitrator is associated.

Absent the existence of such rules and procedures, the arbitration will be conducted in accordance with the California Arbitration Act, California Code of Civil Procedure Section 1280 et seq. and California procedural law (including the Code of Civil Procedure, Civil Code, Evidence Code and Rules of Court, but excluding local rules).

Notwithstanding the rules and procedures that would otherwise apply to the arbitration, and unless the Parties agree to a different arrangement, the place of the arbitration will be in Los Angeles County, California.

Also notwithstanding the rules and procedures that would otherwise apply to the arbitration, and unless the Parties agree to a different arrangement, discovery will be limited as follows:

- (a) Before discovery commences, the Parties shall exchange an initial disclosure of all documents and percipient witnesses which they intend to rely upon or use at any arbitration proceeding (except for documents and witnesses to be used solely for impeachment);
- (b) The initial disclosure will occur within thirty (30) days after the initial conference with the Arbitrator or at such time as the Arbitrator may order;
- (c) Discovery may commence at any time after the Parties' initial disclosure;
- (d) The Parties will not be permitted to propound any interrogatories or requests for admissions;
- (e) Discovery will be limited to twenty-five (25) document requests (with no subparts), three (3) lay witness depositions, and three (3) expert witness depositions (unless the Arbitrator holds otherwise following a showing by the

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Party seeking the additional documents or depositions that the documents or depositions are critical for a fair resolution of the Dispute or that a Party has improperly withheld documents);

- (f) Each Party is allowed a maximum of three (3) expert witnesses, excluding rebuttal experts;
- (g) Within sixty (60) days after the initial disclosure, or at such other time as the Arbitrator may order, the Parties shall exchange a list of all experts upon which they intend to rely at the arbitration proceeding;
- (h) Within thirty (30) days after the initial expert disclosure, the Parties may designate a maximum of two (2) rebuttal experts;
- (i) Unless the Parties agree otherwise, all direct testimony will be in form of affidavits or declarations under penalty of perjury; and
- (j) Each Party shall make available for cross examination at the arbitration hearing its witnesses whose direct testimony has been so submitted.

Subject to Article 18, the Arbitrator will have the authority to grant any form of equitable or legal relief a Party might recover in a court action. The Parties acknowledge and agree that irreparable damage would occur if certain provisions of this Agreement are not performed in accordance with the terms of the Agreement, that money damages would not be a sufficient remedy for any breach of these provisions of this Agreement, and that the Parties shall be entitled, without the requirement of posting a bond or other security, to specific performance and injunctive or other equitable relief as a remedy for a breach of Sections 1.1, 10.1, 11.6, 13.2(c)(ii), or 13.2(c)(iii) or Article 19 of this Agreement.

Judgment on the award may be entered in any court having jurisdiction.

The Arbitrator must, in any award, allocate all of the costs of the binding arbitration (other than each Party's individual attorneys' fees and costs related to the Party's participation in the arbitration, which fees and costs will be borne by such Party), including the fees of the Arbitrator and any expert witnesses, against the Party who did not prevail.

Until such award is made, however, the Parties will share equally in paying the costs of the arbitration.

At the conclusion of the arbitration hearing, the Arbitrator shall prepare in writing and provide to each Party a decision setting forth factual findings, legal analysis, and the reasons on which the Arbitrator's decision is based. The Arbitrator shall also have the authority to resolve claims or issues in advance of the arbitration hearing that would be appropriate for a California superior court judge to resolve in advance of trial. The Arbitrator shall not have the power to commit errors of law or fact, or to commit any

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abuse of discretion, that would constitute reversible error had the decision been rendered by a California superior court. The Arbitrator's decision may be vacated or corrected on appeal to a California court of competent jurisdiction for such error. Unless otherwise agreed to by the Parties, all proceedings before the Arbitrator shall be reported and transcribed by a certified court reporter, with each Party bearing one-half of the court reporter's fees.

16.4. Provisional Relief.

The Parties acknowledge and agree that irreparable damage would occur if certain provisions of this Agreement are not performed in accordance with the terms of this Agreement, that money damages would not be a sufficient remedy for any breach of these provisions of this Agreement, and that the Parties shall be entitled, without the requirement of posting a bond or other security, to seek a preliminary injunction, temporary restraining order, or other provisional relief as a remedy for a breach of Sections 1.1, 10.1, 11.6, 13.2(c)(ii), or 13.2(c)(iii) or Article 19 of this Agreement of this Agreement in any court of competent jurisdiction, notwithstanding the obligation to submit all other Disputes (including all claims for monetary damages under this Agreement) to arbitration pursuant to this Article 16. The Parties further acknowledge and agree that the results of the arbitration may be rendered ineffectual without the provisional relief.

Such a request for provisional relief does not waive a Party's right to seek other remedies for the breach of the provisions specified above in accordance with Article 16, notwithstanding any prohibition against claim-splitting or other similar doctrine. The other remedies that may be sought include specific performance and injunctive or other equitable relief, plus any other remedy specified in this Agreement for the breach of the provision, or if the Agreement does not specify a remedy for the breach, all other remedies available at law or equity to the Parties for the breach.

ARTICLE 17. INDEMNIFICATION

17.1. SCE's Indemnification Obligations.

In addition to any other indemnification obligations SCE may have elsewhere in this Agreement, which are hereby incorporated in this Section 17.1, SCE releases, and shall indemnify, defend and hold harmless Seller, and Seller's directors, officers, employees, agents, assigns, and successors in interest, from and against any and all loss, liability, damage, claim, cost, charge, demand, fine, penalty or expense of any kind or nature (including any direct, damage, claim, cost, charge, demand, or expense, and attorneys' fees (including cost of in-house counsel) and other costs of litigation, arbitration and mediation, and in the case of third-party claims only, indirect and consequential loss or damage of such third-party), arising out of or in connection with any breach made by SCE of its representations and warranties in Section 13.1.

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This indemnity applies notwithstanding Seller's active or passive negligence. However, Seller will not be indemnified hereunder for its loss, liability, damage, claim, cost, charge, demand or expense to the extent caused by its gross negligence or willful misconduct.

17.2. Seller's Indemnification Obligations.

In addition to any other indemnification obligations Seller may have elsewhere in this Agreement, which are hereby incorporated in this Section 17.2, Seller releases, and shall indemnify, defend and hold harmless SCE, and SCE's directors, officers, employees, agents, assigns, and successors in interest, from and against any and all loss, liability, damage, claim, cost, charge, demand, penalty, fine or expense of any kind or nature (including any direct, damage, claim, cost, charge, demand, or expense, and attorneys' fees (including cost of in-house counsel) and other costs of litigation, arbitration or mediation, and in the case of third-party claims only, indirect or consequential loss or damage of such third-party), arising out of or in connection with:

- (a) any breach made by Seller of its representations, warranties and covenants in Article 13;
- (b) Seller's failure to fulfill its obligations regarding Resource Adequacy Benefits as set forth in Section 10.1;
- (c) any violation of a local, state, or federal law, statute or regulation, arising out of or in connection with Seller's performance of, or failure to perform this Agreement;
- (d) the Storage Unit(s), or any equipment, software, applications or programs (or any portion of same) used in connection with the Storage Unit(s) or the Project result in an infringement upon or violation of any trade secret, trademark, trade name, copyright, patent, or other intellectual property rights of any third party;
- (e) any (i) release of a Hazardous Material by Seller its EPC Contractor or any of Seller's or its EPC Contractor's subcontractors, (ii) enforcement or compliance proceeding relating to or in connection with any alleged, threatened or actual violation of any environmental law by Seller or its EPC Contractor or any of Seller's or its EPC Contractor's subcontractors, or (iii) action reasonably necessary to abate, investigate, remediate or prevent a violation or threatened violation of any environmental law by Seller or its EPC Contractor or any of Seller's or its EPC Contractor's subcontractors;
- (f) injury or death to persons, including SCE employees, and physical damage to property, including SCE property, where the damage arises out of, is related to, or is in connection with, Seller's construction, ownership or operation of the Project, or obligations or performance under this Agreement; and

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- (g) any penalties or fines assessed against SCE by the Commission or by the CAISO resulting from and to the extent caused by any failure by Seller to perform its obligations under this Agreement, including, but not limited to Seller's failure to provide SCE with any portion of the Contract Capacity, meet the time requirements for dispatching the DR Resource, and provide Notice of the non-availability of any portion of the Contract Capacity as required under Section 10.1(b) hereof.

This indemnity applies notwithstanding SCE's active or passive negligence. However, SCE will not be indemnified for its loss, liability, damage, claim, cost, charge, demand or expense to the extent caused by its gross negligence or willful misconduct.

With respect to Section 17.2(b), the Parties shall use commercially reasonable efforts to minimize such penalties and fines, provided that in no event shall SCE be required to utilize or change its utilization of its owned or controlled assets or market positions to minimize these penalties and fines. If Seller fails to pay such penalties or fines, or fails to reimburse SCE for such penalties and fines, then SCE may offset the cost of those penalties and fines against any future amounts it may owe to Seller under this Agreement.

17.3. Indemnification Claims.

All claims for indemnification by a Party entitled to be indemnified under this Agreement (an "Indemnified Party") by the other Party (the "Indemnitor") will be asserted and resolved as follows:

- (a) If a claim or demand for which an Indemnified Party may claim indemnity is asserted against or sought to be collected from an Indemnified Party by a third party, the Indemnified Party shall as promptly as practicable give Notice to the Indemnitor; provided, failure to provide this Notice will relieve Indemnitor only to the extent that the failure actually prejudices Indemnitor.
- (b) Indemnitor will have the right to control the defense and settlement of any claims in a manner not adverse to Indemnified Party but cannot admit any liability or enter into any settlement without Indemnified Party's approval.
- (c) Indemnified Party may employ counsel at its own expense with respect to any claims or demands asserted or sought to be collected against it; provided, if counsel is employed due to a conflict of interest or because Indemnitor does not assume control of the defense, Indemnitor will bear the expense of this counsel.

17.4. Survival.

All indemnity rights shall survive the termination of this Agreement for a period of four (4) years.

ARTICLE 18. LIMITATION OF REMEDIES, LIABILITY, AND DAMAGES

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EXCEPT AS SET FORTH HEREIN, THERE ARE NO WARRANTIES BY EITHER PARTY UNDER THIS AGREEMENT, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ANY AND ALL IMPLIED WARRANTIES ARE DISCLAIMED. THE PARTIES CONFIRM THAT THE EXPRESS REMEDIES AND MEASURES OF DAMAGES PROVIDED IN THIS AGREEMENT SATISFY THE ESSENTIAL PURPOSES HEREOF.

FOR BREACH OF ANY PROVISION FOR WHICH AN EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED, SUCH EXPRESS REMEDY OR MEASURE OF DAMAGES WILL BE THE SOLE AND EXCLUSIVE REMEDY, THE OBLIGOR'S LIABILITY WILL BE LIMITED AS SET FORTH IN SUCH PROVISION AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED, UNLESS THE PROVISION IN QUESTION PROVIDES THAT THE EXPRESS REMEDIES ARE IN ADDITION TO OTHER REMEDIES THAT MAY BE AVAILABLE.

SUBJECT TO SECTION 16.4, IF NO REMEDY OR MEASURE OF DAMAGES IS EXPRESSLY PROVIDED HEREIN, THE OBLIGOR'S LIABILITY WILL BE LIMITED TO DIRECT ACTUAL DAMAGES ONLY, SUCH DIRECT ACTUAL DAMAGES WILL BE THE SOLE AND EXCLUSIVE REMEDY AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED.

UNLESS EXPRESSLY PROVIDED IN THIS AGREEMENT, INCLUDING WITHOUT LIMITATION THE PROVISIONS OF ARTICLE 17 (INDEMNITY), NEITHER PARTY WILL BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS OR OTHER BUSINESS INTERRUPTION DAMAGES, BY STATUTE, IN TORT OR CONTRACT, UNDER ANY INDEMNITY PROVISION OR OTHERWISE.

IT IS THE INTENT OF THE PARTIES THAT THE LIMITATIONS HEREIN IMPOSED ON REMEDIES AND THE MEASURE OF DAMAGES BE WITHOUT REGARD TO THE CAUSE OR CAUSES RELATED THERETO, INCLUDING THE NEGLIGENCE OF ANY PARTY, WHETHER SUCH NEGLIGENCE BE SOLE, JOINT OR CONCURRENT, OR ACTIVE OR PASSIVE.

TO THE EXTENT ANY DAMAGES REQUIRED TO BE PAID HEREUNDER ARE LIQUIDATED, THE PARTIES ACKNOWLEDGE THAT THE DAMAGES ARE DIFFICULT OR IMPOSSIBLE TO DETERMINE, OR OTHERWISE OBTAINING AN ADEQUATE REMEDY IS INCONVENIENT AND THE DAMAGES CALCULATED HEREUNDER CONSTITUTE A REASONABLE APPROXIMATION OF THE HARM OR LOSS.

NOTHING IN THIS ARTICLE PREVENTS, OR IS INTENDED TO PREVENT SCE FROM PROCEEDING AGAINST OR EXERCISING ITS RIGHTS WITH RESPECT TO ANY PERFORMANCE ASSURANCE AND DELIVERY DATE SECURITY.

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ARTICLE 19. CONFIDENTIALITY

Neither Party shall disclose the terms or conditions of this Agreement to a third party (other than the Party's or the Party's Affiliates' officers, directors, employees, lenders, counsel, accountants, advisors, or rating agencies who have a need to know such information and have agreed to keep such terms confidential) except (a) in order to comply with any Applicable Law, order, regulation, ruling, summons, subpoena, exchange rule, or accounting disclosure rule or standard, or to make any showing required by any applicable Governmental Body; (b) to the extent necessary for the enforcement of this Agreement; (c) as may be obtained from a non-confidential source that disclosed such information in a manner that did not violate its obligations to the non-disclosing Party in making such disclosure; (d) to the extent such information is or becomes generally available to the public prior to such disclosure by a Party; (e) when required to be released in connection with any regulatory proceeding (provided that the releasing Party makes reasonable efforts to obtain confidential treatment of the information being released); or (f) with respect to SCE, as may be furnished to its duly authorized regulatory and governmental agencies or entities, including without limitation the Commission and all divisions thereof, to SCE's Procurement Review Group, a group of participants including members of the Commission and other governmental agencies and consumer groups established by the Commission in Commission decisions 02-08-071 and 03-06-071, and to SCE's Cost Allocation Mechanism Group established by the CPUC in D.07-12-052. The existence of this Agreement is not subject to this confidentiality obligation; provided that neither Party shall make any public announcement relating to this Agreement unless required pursuant to subsection (a) or (e) of the foregoing sentence of this Article 19. The Parties shall be entitled to all remedies available at law or in equity to enforce, or seek relief in connection with, this confidentiality obligation. With respect to information provided in connection with this Agreement, this obligation shall survive for a period of three (3) years following the expiration or termination of this Agreement. For the purposes of this Article 19, "Affiliate" for Seller shall mean _____ and "Affiliate" for SCE shall mean Edison International.

ARTICLE 20. FORCE MAJEURE

A Party shall not be in default in the performance of its obligations under this Agreement when and to the extent that the failure or delay of its performance is due to an event of Force Majeure.

If, because of a Force Majeure, either Party is unable to perform its obligations under this Agreement, such Party (the "Claiming Party") shall be excused from whatever performance (other than the obligation to make payments then due or becoming due with

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respect to performance prior to the Force Majeure) is affected or would have been required by or but for the Force Majeure only to the extent so affected, provided:

- (a) the Claiming Party, no more than one (1) Business Day after the initial occurrence of the claimed Force Majeure, gives the other Party Notice describing the particulars of the occurrence;
- (b) the Claiming Party, within five (5) Business Days of providing Notice of occurrence of the Force Majeure, provides evidence reasonably sufficient to establish that the occurrence constitutes a Force Majeure as defined in this Agreement;
- (c) the suspension of performance is of no greater scope and of no longer duration than is required by the Force Majeure; and
- (d) as soon as Claiming Party is able to resume performance of its obligations under this Agreement, it shall do so and shall promptly give the other Party Notice of this resumption.

Either Party may terminate this Agreement on Notice, which will be effective five (5) Business Days after such Notice is provided, if an event of Force Majeure extends for more than three hundred sixty-five (365) consecutive days and materially and adversely affects the operations of the Claiming Party.

ARTICLE 21. CONSENT TO COLLATERAL ASSIGNMENT

21.1. Consent to Collateral Assignment.

Subject to the provisions of this Article 21, Seller shall have the right to assign this Agreement to Lender as collateral for any financing or refinancing of the Project; *provided*, Seller shall be responsible for SCE's reasonable costs associated with the preparation, review, execution and delivery of documents in connection with any such assignment, including without limitation attorneys' fees. SCE shall in good faith work with Seller and Lender to agree upon a consent to collateral assignment of this Agreement ("Collateral Assignment Agreement"). The Collateral Assignment Agreement shall be in form and substance agreed to by SCE, Seller and Lender, and shall include, among others, the following provisions:

- (a) SCE shall give Notice of an Event of Default by Seller, to the persons to be specified by Lender in the Collateral Assignment Agreement, prior to exercising its right to terminate the Agreement as a result of such Event of Default.
- (b) Following an Event of Default by Seller under this Agreement, SCE may require Seller or Lender to provide to SCE a report setting forth:

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- (i) the status of efforts by Seller or Lender to develop a plan to cure the Event of Default;
- (ii) impediments to the cure plan or its development;
- (iii) if a cure plan has been adopted, the status of the cure plan's implementation (including any modifications to the plan as well as the expected timeframe within which any cure is expected to be implemented); and
- (iv) any other information which SCE may reasonably require related to the development, implementation and timetable of the cure plan.

Seller or Lender shall provide the report to SCE within ten (10) Business Days of Notice from SCE requesting the report. SCE shall have no further right to require the report with respect to a particular Event of Default after that Event of Default has been cured.

- (c) Lender shall have the right to cure an Event of Default on behalf of Seller, only if Lender sends a written notice to SCE prior to the end of any cure period indicating Lender's intention to cure. Lender must remedy or cure the Event of Default within the cure period under the Agreement; provided, such cure period may, in SCE's sole discretion, be extended by no more than an additional one hundred eighty (180) days.
- (d) Lender shall have the right to consent prior to any termination of the Agreement which does not arise out of an Event of Default.
- (e) Lender shall receive prior Notice of, and the right to approve, material amendments to the Agreement, which approval shall not be unreasonably withheld, delayed or conditioned.
- (f) In the event Lender, directly or indirectly, takes possession of, or title to the Project (including possession by a receiver or title by foreclosure or deed in lieu of foreclosure), Lender shall assume all of Seller's obligations arising under the Agreement and all related agreements (subject to such limits on liability as are mutually agreed to by Seller, SCE and Lender as set forth in the Collateral Assignment Agreement). Lender shall have no personal liability for any monetary obligations of Seller under the Agreement which are due and owing to SCE as of the assumption date; provided, if, prior to such assumption, SCE advises Lender that SCE will require that Lender cure (or cause to be cured) any Event of Default existing as of the assumption date in order to avoid the exercise by SCE (in its sole discretion) of SCE's right to terminate the Agreement in respect of such Event of Default, then Lender, at its option and in its sole discretion, may elect to either (i) cause such Event of Default to be cured, or (ii) assume Seller's obligations under the Agreement and all related agreements, including the pre-assumption payment obligations that are otherwise excluded.

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- (g) If Lender elects to sell or transfer the Project (after Lender directly or indirectly, takes possession of, or title to the Project), or sale of the Project occurs through the actions of Lender (for example, a foreclosure sale where a third party is the buyer, or otherwise), then Lender must cause the transferee or buyer to assume all of Seller's obligations arising under this Agreement and all related agreements as a condition of the sale or transfer. Such sale or transfer may be made only to an entity with financial qualifications (including collateral support and any other additional security as may be required by SCE) and operating experience at least equivalent to Seller as of the Effective Date, as determined by SCE in its sole discretion.
- (h) If this Agreement is rejected in Seller's bankruptcy or otherwise terminated in connection therewith and if Lender or its designee, directly or indirectly, takes possession of, or title to, the Project (including possession by a receiver or title by foreclosure or deed in *lieu* of foreclosure), Lender shall or shall cause its designee to promptly enter into a new agreement with SCE having substantially the same terms as this Agreement. Notwithstanding the foregoing, SCE shall not be required to enter into such agreement with Lender or such designee if there has been a change in circumstances resulting from actions of Seller in its bankruptcy case that would, in SCE's judgment, materially impact the rights or obligations of SCE under such agreement.
- (i) Seller shall reimburse, or shall cause Lender to reimburse, SCE for all reasonable and direct third party expenses (including the reasonable fees and expenses of counsel of SCE's choice) incurred by SCE in the preparation, negotiation, execution and/or delivery of any documents required under this Article 21, or otherwise requested by Seller or Lender in connection with this Article 21.

ARTICLE 22. MISCELLANEOUS

22.1. General.

- (a) This Agreement shall be considered for all purposes as prepared through the joint efforts of the parties and shall not be construed against one Party or the other as a result of the preparation, substitution, submission or other event of negotiation, drafting or execution hereof.
- (b) The term "including," when used in this Agreement, shall be by way of example only and shall not be considered in any way to be in limitation.
- (c) The headings used herein are for convenience and reference purposes only.
- (d) Each Party agrees that it will not assert, or defend itself, on the basis that any applicable tariff is inconsistent with this Agreement.

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- (e) Words having well-known technical or industry meanings have these meanings unless otherwise specifically defined in this Agreement.
- (f) Whenever this Agreement specifically refers to any law, tariff, government department or agency, or credit rating agency, the Parties hereby agree that the reference also refers to any successor to such law, tariff or organization.
- (g) Nothing in this Agreement relieves either Party from, or modifies, any obligation or requirement that exists in any law, tariff, rule, or regulation.
- (h) The Parties acknowledge and agree that this Agreement and the transactions contemplated by this Agreement constitute a “forward contract” within the meaning of the Bankruptcy Code and that SCE and Seller are each “forward contract merchants” within the meaning of the Bankruptcy Code.

22.2. Governing Law and Venue.

THIS AGREEMENT AND THE RIGHTS AND DUTIES OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY AND CONSTRUED, ENFORCED AND PERFORMED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAWS. EACH PARTY WAIVES ITS RESPECTIVE RIGHT TO ANY JURY TRIAL WITH RESPECT TO ANY DISPUTE ARISING UNDER OR IN CONNECTION WITH THIS AGREEMENT.

22.3. Amendment.

This Agreement can only be amended by a writing signed by both Parties.

22.4. Assignment.

Neither Party shall assign this Agreement or its rights hereunder, as the case may be, without the prior written consent of the other Party, which consent may be withheld in the exercise of its sole discretion; provided, however, either Party may, without the consent of the other Party (and without relieving itself from liability hereunder), (i) transfer, sell, pledge, encumber or assign this Agreement or the accounts, revenues or proceeds hereof or thereof, as the case may be, in connection with any financing or other financial arrangements to any person or entity whose creditworthiness is equal to or higher than that of such Party, (ii) transfer or assign this Agreement to an Affiliate of such Party which Affiliate’s creditworthiness is equal to or higher than that of such Party, or (iii) transfer or assign this Agreement to any person or entity succeeding to all or substantially all of the assets of such Party and whose creditworthiness is equal to or higher than that of such Party; provided, however, that in each such case, any such assignee shall agree in writing to be bound by the terms and conditions hereof and so long as the transferring Party delivers such tax and enforceability assurance as the non-transferring Party may reasonably request.

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22.5. Successors and Assigns.

This Agreement shall be binding upon and inure to the benefit of, the Parties and their respective successors and assigns. This Agreement is not intended to confer any rights or remedies upon any other persons other than the Parties.

22.6. Waiver.

None of the provisions of this Agreement shall be considered waived by either Party unless the Party against whom such waiver is claimed gives the waiver in writing. The failure of either Party to insist in any one instance upon strict performance of any the provisions of this Agreement or to take advantage of any of its rights hereunder shall not be construed as a waiver of any such provisions or the relinquishments of such rights for the future but the same shall continue and remain in full force and effect. Waiver by either Party of any default of the other Party shall not be deemed a waiver of any other default.

22.7. Obligations Surviving Termination.

Except as may be provided or limited by this Agreement, the obligations which by their nature are intended to survive termination of this Agreement, including representations, warranties, covenants and rights and obligations with respect to indemnification, payment, settlement, and confidentiality, shall so survive.

22.8. No Agency.

Except as otherwise provided explicitly herein, in performing their respective obligations under this Agreement, neither Party is acting, or is authorized to act, as the other Party's agent.

22.9. No Third Party Beneficiaries.

This Agreement shall not impart any rights enforceable by any third party (other than a permitted successor or assignee bound by this Agreement).

22.10. Entire Agreement.

This Agreement, when fully executed, constitutes the entire agreement by and between the Parties as to the subject matter hereof, and supersedes all prior understandings, agreements or representations by or between the Parties, written or oral, to the extent they have related in any way to the subject matter hereof. Each Party represents that, in entering into this Agreement, it has not relied upon any promise, inducement, representation, warranty, agreement or other statement not set forth in this Agreement.

22.11. Severability.

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If any term, section, provision or other part of this Agreement, or the application of any term, section, provision or other part of this Agreement, is held to be invalid, illegal or void by a court or regulatory agency of proper jurisdiction, all other terms, sections, provisions or other parts of this Agreement shall not be affected thereby but shall remain in force and effect unless a court or regulatory agency holds that the provisions are not separable from all other provisions of this Agreement.

22.12. Multiple Originals.

This Agreement may be executed in multiple counterparts, each of which shall be deemed an original. Any signature page of this Agreement may be detached from any counterpart of this Agreement without impairing the legal effect of any of the signatures thereon, and may be attached to another counterpart of this Agreement identical in form hereto by having attached to it one or more signature pages.

22.13. Mobile Sierra.

- (a) Absent the agreement of all Parties to the proposed change, the standard of review for changes to any rate, charge, classification, term or condition of this Agreement, whether proposed by a Party (to the extent that any waiver in subsection (b) below is unenforceable or ineffective as to such Party), a non-party or FERC acting sua sponte, shall be the ‘public interest’ standard of review set forth in *United Gas Pipe Line Co. v. Mobile Gas Service Corp.*, 350 U.S. 332 (1956) and *Federal Power Commission v. Sierra Pacific Power Co.*, 350 U.S. 348 (1956) (the ‘Mobile Sierra’ doctrine), and clarified by *Morgan Stanley Capital Group, Inc. v. Public Util. Dist. No. 1 of Snohomish* 554 U.S. 527 (2008).
- (b) Notwithstanding any provision of Agreement, and absent the prior written agreement of the Parties, each Party, to the fullest extent permitted by applicable laws, for itself and its respective successors and assigns, hereby also expressly and irrevocably waives any rights it can or may have, now or in the future, whether under Sections 205, 206, or 306 of the Federal Power Act or otherwise, to seek to obtain from FERC by any means, directly or indirectly (through complaint, investigation, supporting a third party seeking to obtain or otherwise), and each hereby covenants and agrees not at any time to seek to so obtain, an order from FERC changing any section of this Agreement specifying any rate or other material economic terms and conditions agreed to by the Parties.

22.14. Performance Under this Agreement.

Each Party and its representatives shall maintain records and supporting documentation relating to this Agreement, and the performance of the Parties hereunder in accordance with, and for the applicable time periods required by, all Applicable Laws.

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[Remainder of Page Intentionally Left Blank]

**DEMAND RESPONSE ENERGY STORAGE AGREEMENT
BETWEEN
[SELLER] AND SOUTHERN CALIFORNIA EDISON COMPANY**

IN WITNESS WHEREOF, the Parties have read this Agreement, understand it, and agree to be bound by its terms as of the Execution Date.

<i>[SELLER'S NAME],</i> <i>a [Seller's jurisdiction of organization and type of organization].</i>	SOUTHERN CALIFORNIA EDISON COMPANY, a California corporation.
By: _____ <i>[Name]</i> <i>[Title]</i>	By: _____
Date: _____	Date: _____

APPENDIX 1.8 STORAGE UNITS

Excel Appendices

APPENDIX 5.1(A) MILESTONE SCHEDULE

– Project Schedule –

Seller has provided dates for development, construction, commissioning, and testing of the Project, showing all significant elements and milestones, as applicable, such as permitting, procurement, financing, engineering, acceptance testing, Seller's proposed Expected Initial Delivery Date, and proposed Delivery Period.

[SCE Comment: This list is illustrative only. Seller to insert project specific list]

Line	Projected Completion Date	Milestone
1		Front End Engineering / Permits / Agreements
2		File a CEC Certification and Verification Application
3		Finalize Labor Agreement Negotiations
4		Receive CEC Certification and Verification or APCD permit if applicable
5		Obtain Control Of All Lands and Rights-Of-Way Comprising The Site
6		Receive CEC Full Notice To Proceed
7		Receive All Other Required Permits
8		Financing
9		Verify That Seller's Bank Has Received All Required Due Diligence Information
10		Complete Bank Financing
11		Engineering
12		Execute EPC Contract
13		Begin Existing Site Re-Engineering
14		Begin New Storage Unit Engineering Design

Line	Projected Completion Date	Milestone
15		Lump Sum Estimate Preparation
16		Complete Existing Site Re-Engineering
17		Complete New Storage Unit Engineering Design
18		Construction – Initial Site Work
19		Begin Civil Tasks - CTG's
20		Begin Mechanical Tasks - U/G Piping
21		Begin Electrical Tasks - U/G Electrical
22		Construction
23		Begin Construction of the Project - Erect Equipment
25		Civil Tasks - Balance of Plant
26		Mechanical Tasks - A/G Piping
27		Electrical Tasks - A/G Electrical
28		Erect Storage Units
29		Commission Storage Units
30		Complete Construction of the Project
31		Commissioning
32		Begin Start-Up Activities - BOP Systems
33		Achieve Initial Operation
34		Demonstrate Contract Capacity
35		Expected Initial Delivery Date

APPENDIX 5.1(B)

CONSTRUCTION REPORT

Monthly Project Progress Report

From the Effective Date and continuing until the Initial Delivery Date, Seller will provide a monthly project progress report containing, at a minimum, the information listed below.

- (a) An executive summary;
- (b) Project bar chart schedule (including current status of all events);
- (c) Assessment of percent construction complete and percent change from immediately previous report;
- (d) Description of general work status (including short passages as applicable) on:
 - (i) Engineering;
 - (ii) Procurement;
 - (iii) Permitting;
 - (iv) Major construction activities in the prior month;
 - (v) Testing;
- (e) Forecast activities for next month; and
- (f) Potential issues affecting the Project.

Seller must notify SCE's contract manager for the Agreement in writing of its receipt of any additional documents, which fall into the categories, listed (in a – f) below, and make such documents available to SCE within two (2) Business Days of such receipt:

- a. All material written commitments regarding construction work at the Project that could impact completion schedule or Initial Delivery Date;
- b. Executed work orders for construction of the Project;
- c. Construction agreements;
- d. Letters of intent;
- e. Precedent agreements; and
- f. Engineering assessments of the Project or any Storage Unit.

APPENDIX 6
TESTING PROTOCOLS

INITIAL COMMERCIAL OPERATION TEST

[SCE Note: TBD]

Storage Unit

APPENDIX 9
FORM OF LETTER OF CREDIT

IRREVOCABLE NONTRANSFERBLE STANDBY
LETTER OF CREDIT

Reference Number: _____

Transaction Date:

BENEFICIARY:

Southern California Edison Company
2244 Walnut Grove Avenue
Risk Control GO#1, Quad 2A
Rosemead, CA 91770
Attn: Manager Credit, Risk & Collateral Management

Ladies and Gentlemen:

_____ (the "Bank") hereby establishes this Irrevocable Nontransferable Standby Letter of Credit ("Letter of Credit") in favor of Southern California Edison Company, a California corporation (the "Beneficiary"), for the account of [CONTRACT PARTY], a _____ corporation, (the "Applicant"), for the amount of XXX AND XX/100 Dollars (\$ _____) (the "Available Amount"), effective immediately and expiring at 5:00 p.m., California time, on _____ (the "Expiration Date").

This Letter of Credit shall be of no further force or effect upon the close of business on the Expiration Date or, if such day is not a Business Day (as hereinafter defined), on the next Business Day.

For the purposes hereof, "Business Day" shall mean any day on which commercial banks are not authorized or required to close in Los Angeles, California.

Subject to the terms and conditions herein, funds under this Letter of Credit are available to the Beneficiary by presentation in compliance on or prior to 5:00 p.m. California time, on or prior to the Expiration Date, of the following:

1. The original or a photocopy of this Letter of Credit and all amendments; and
2. The Drawing Certificate issued in the form of Attachment A attached hereto and which forms an integral part hereof, duly completed and purportedly bearing the signature of an authorized representative of the Beneficiary.

Notwithstanding the foregoing, any full or partial drawing hereunder may be requested by transmitting the requisite documents as described above to the Bank by facsimile at _____ or such other number as specified from time-to-time by the Bank.

The facsimile transmittal shall be deemed delivered when received. Drawings made by facsimile transmittal are deemed to be the operative instrument without the need of originally signed documents.

Partial drawing of funds shall be permitted under this Letter of Credit, and this Letter of Credit shall remain in full force and effect with respect to any continuing balance; *provided*, the Available Amount shall be reduced by the amount of each such drawing.

This Letter of Credit is not transferable or assignable. Any purported transfer or assignment shall be void and of no force or effect.

Banking charges shall be the sole responsibility of the Applicant.

This Letter of Credit sets forth in full our obligations and such obligations shall not in any way be modified, amended, amplified or limited by reference to any documents, instruments or agreements referred to herein, except only the attachment referred to herein; and any such reference shall not be deemed to incorporate by reference any document, instrument or agreement except for such attachment.

The Bank engages with the Beneficiary that Beneficiary's drafts drawn under and in compliance with the terms of this Letter of Credit will be duly honored if presented to the Bank on or before the Expiration Date.

Except so far as otherwise stated, this Letter of Credit is subject to the International Standby Practices ISP98 (also known as ICC Publication No. 590), or revision currently in effect (the 'ISP'). As to matters not covered by the ISP, the laws of the State of California, without regard to the principles of conflicts of laws thereunder, shall govern all matters with respect to this Letter of Credit.

AUTHORIZED SIGNATURE for Issuer

By:_____

Name:_____

Title:_____

ATTACHMENT A TO APPENDIX 9

DRAWING CERTIFICATE
TO [ISSUING BANK NAME]
IRREVOCABLE NONTRANSFERABLE STANDBY LETTER OF CREDIT
Reference Number.
(Sample Text)

Bank
Bank Address

Subject: Irrevocable Nontransferable Standby Letter of Credit
Reference Number: _____

The undersigned _____, an authorized representative of Southern California Edison Company (the “Beneficiary”), hereby certifies to *[Issuing Bank Name]* (the “Bank”), and _____ (the “Applicant”), with reference to Irrevocable Nontransferable Standby Letter of Credit No. _____, dated _____, (the “Letter of Credit”), issued by the Bank in favor of the Beneficiary, as follows as of the date hereof:

1. The Beneficiary is entitled to draw under the Letter of Credit an amount equal to \$_____, for the following reason(s) [check applicable provision]:
 - ☐]A. An Event of Default, as defined in that certain Demand Response Energy Storage Agreement between Applicant and Beneficiary, dated as of *[Date of Execution]* (the “Agreement”) with respect to the Applicant has occurred and is continuing.
 - ☐]B. An Early Termination Date (as defined in the Agreement) has been set by the Beneficiary under the Agreement.
 - ☐]C. The Letter of Credit will expire in fewer than twenty (20) Business Days (as defined in the Agreement) from the date hereof, and Applicant has not provided Beneficiary alternative Performance Assurance (as defined in the Agreement) or Delivery Date Security (as defined in the Agreement) acceptable to Beneficiary.
 - ☐]D. The Bank or Applicant has heretofore provided written notice to the Beneficiary of the Bank’s or Applicant’s intent not to renew the Letter of Credit following the present Expiration Date thereof, and Applicant has failed to provide the Beneficiary with a replacement letter of credit satisfactory to Beneficiary in its sole discretion within thirty (30) days following the date of the notice of non-renewal.
 - ☐]E. The Beneficiary has not been paid any or all of the Applicant’s payment obligations now due and payable under the Agreement.
 - ☐]F. Daily Delay Damages (as defined in the Agreement) are now due and payable under the Agreement.

[]G. The Beneficiary is entitled to retain the entire Delivery Date Security (as defined in the Agreement): (i) because the Initial Delivery Date (as defined in the Agreement) has not occurred on or before _____; or (ii) because the Agreement has been terminated due to an Event of Default by Applicant before the Initial Delivery Date.

2. Based upon the foregoing, the Beneficiary hereby makes demand under the Letter of Credit for payment of U.S. DOLLARS AND ____/100ths (U.S.\$_____), which amount does not exceed (i) the amount set forth in paragraph 1 above, and (ii) the Available Amount under the Letter of Credit as of the date hereof.

3. Funds paid pursuant to the provisions of the Letter of Credit shall be wire-transferred to the Beneficiary in accordance with the following instructions:

Unless otherwise provided herein, capitalized terms which are used and not defined herein shall have the meaning given each such term in the Letter of Credit.

IN WITNESS WHEREOF, this Certificate has been duly executed and delivered on behalf of the Beneficiary by its authorized representative as of this ____ day of _____, ____.

Beneficiary:

SOUTHERN CALIFORNIA EDISON
COMPANY

By: _____


Name: _____

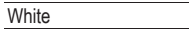
Title: _____

DR Resource Purchase Agreement Excel Appendices Instructions

v.1

Color/Pattern Codes

 Space to type in required Information

 Formula

 Select from a drop-down box

SCE Excel Appendices: DR Resource Purchase Agreement

Tab Names:	Required Information
Instructions	n/a
Front Page	Required
Bid Parameters	Required

Notes:

File should be opened and completed using Excel 2010
Please fill out all data in units requested.

Workbook Instructions

- Complete each worksheet of the entire workbook to the greatest extent possible

Counterparty Identification - "Front Page" tab

- (a) Seller Name – Seller must enter the official name of the Counterparty on the "Front Page" tab (Cell A21).
- (b) File Update Date - Seller should update the File Update Date (Cell F28) field any time a change is made to the Excel Appendices.
- (c) CPID – SCE will create a Counterparty ID composed of no more than 4 alphanumeric characters (no spaces) and enter the ID on the "Front Page" tab (Cell F29).

INDICATIVE OFFER

DEMAND RESPONSE RESOURCE PURCHASE AGREEMENT

between

SOUTHERN CALIFORNIA EDISON COMPANY

and

Seller

File Update Date:	
CPID:	

INDICATIVE OFFER

DEMAND RESPONSE RESOURCE PURCHASE AGREEMENT

File Update Date:

Bid Details

1.5(a)(ii) Location			
1.3 Delivery Start Date			
1.3 Delivery End Date			
1.3(a) Delivery Days (Monday - Friday)		through	
1.3(b) Delivery Hours (HE## - HE##)		through	
1.3(c) Operating Months		through	
1.4(a) Minimum Duration Per Dispatch (minutes)			
1.4(a) Maximum Duration Per Dispatch (minutes)			
1.4(a) Maximum Dispatches Per Day			
1.4(a) Maximum Dispatch Hours Per Month			
1.4(a) Maximum Dispatch Hours Per Term Year			
1.4(b) Energy Rate (\$/kWh)			
1.4(b) First Year of Delivery			

1.4(b)			
Year	Month	Contract Capacity (kw)	Capacity Rate (\$/kW-mo)
	January		
	February		
	March		
	April		
	May		
	June		
	July		
	August		
	September		
	October		
	November		
	December		
	January		
	February		
	March		
	April		
	May		
	June		
	July		

Appendix C

Consistent Evaluation Protocol

CONSISTENT EVALUATION PROTOCOL (CEP) FOR ENERGY STORAGE BENCHMARKING AND GENERAL REPORTING PURPOSES

February 28, 2014

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CONSISTENT EVALUATION PROTOCOL (CEP) FOR ENERGY STORAGE BENCHMARKING AND GENERAL REPORTING PURPOSES

A. Background and Scope

1. Background

The Decision Adopting Energy Storage Procurement Framework and Design Program (“the Decision”) requires the Investor Owned Utilities (“IOUs”) to confer with Energy Division Staff to develop a consistent evaluation protocol to be used for benchmarking and general reporting purposes.¹ Accordingly, Pacific Gas & Electric, San Diego Gas & Electric, and Southern California Edison worked with the Energy Division to create this “Consistent Evaluation Protocol” (“CEP”) document.

In Appendix A of the Decision, Section (3)(d), the CEP is described further as the following.

“An evaluation protocol consistent across the IOUs that includes a consistent set of assumptions and methods for valuing storage benefits, such as market services and avoided costs, and estimating project costs that allow adjustments for utility-specific factors (such as location, portfolio, cost of capital, etc.) and utility-specific modeling tools based outputs affecting valuation as appropriate to provide a consistent basis for comparison across utilities, bids, and use cases.”

The CEP includes both quantitative and qualitative information. The CEP is not meant to directly correlate to IOU specific evaluation or shortlisting criteria. Therefore, the outcome under the CEP will differ from the outcome under the IOU specific evaluation protocol.

2. Scope

Nothing in the CEP is to be construed or implied as restricting or invalidating the assumptions, models, tools, and analysis each IOU might choose to value, rank, or shortlist the physical and financial merits of offers or bids from the IOUs’ energy storage solicitations (Offers) that might be received to comply and fulfill each IOU’s energy storage needs at the transmission, distribution, and customer levels.

¹ D.13-10-040, at 63.

As stated in the Decision, the CEP is only for “benchmarking and general reporting purposes” and is not a replacement for the IOUs’ individual, proprietary, evaluation protocols to be used to evaluate the cost and benefits or other quantitative or qualitative aspects of Offers resulting from IOU energy storage solicitations.

The CEP is focused on the methodology to determine Net Market Value (NMV). For the CEP to yield consistent numerical results across the IOUs for reporting purposes, publicly available information will be used as a substitute for the confidential, commercially-sensitive inputs the IOUs will use in evaluation of actual commercial Offers from market participants.

Beyond NMV, each IOU will have specific qualitative and quantitative elements that will be used to evaluate and select energy storage projects. Those IOU-specific qualitative and quantitative elements are not included in the CEP and will not be limited by the CEP. The Decision clarifies this intent as follows.

*“We agree with parties that any actual finding of cost-effectiveness should only be done in a utility application for approval of storage contracts or rate-based additions, where there is a specific project and actual project inputs... As such, we **shall allow the IOUs to propose their own methodology to evaluate the cost and benefits of bids.**[emphasis added]”*

The CEP shall not be implemented into a model. To complete the CPUC’s benchmarking and reporting goals, each IOU will evaluate the quantitative and qualitative elements of short-listed energy storage projects through its respective models, albeit using publicly available input assumptions needed to calculate NMV.² Given that the purpose of the CEP is to provide a succinct comparison tool for storage Offers, it is not possible to capture every cost and benefit of storage Offers in the CEP. The scope of the CEP includes all three of the storage domains defined in the Decision—transmission, distribution and customer—in either a quantitative or qualitative form.

² Described in Section C below.

B. Presentation Format for CEP and Confidentiality

1. Presentation Format for CEP

The presentation format for Offers under the CEP will be an electronic spreadsheet, an example of which is included as Attachment 1 of this document (the Spreadsheet).³ The Spreadsheet will include prescribed column headings for information describing the Offers. Per the Decision, this information will be based on a, “consistent set of assumptions and methods for valuing storage benefits” as described herein. For each of the Offers, the Spreadsheet will include:

- **Descriptive information** about the Offers and their proposed projects, as described in Section D below.
- **Quantitative information** consisting of an NMV calculation, inputs to NMV, and the benefit and cost components used to calculate NMV, as described in section Section E below.
- **Qualitative information** consisting of a “yes/no” indication of which energy storage ‘end uses’⁴ might exist for each of the Offers, as described in section Section F below.

The Spreadsheet will not include all evaluation rating or ranking elements or criteria that may be considered in utilities’ evaluations of Offers. For example, the Spreadsheet does not capture information on (1) Location, (2) Portfolio Need, (3) Contract Length, (4) Project Viability, (5) Supplier Diversity, (6) Credit Status including Counterparty Concentration, (7) Number of Proposed Modifications to the Power Purchase Agreement (“PPA”) and (8) the Offer’s consistency with and contribution to California’s goals for the energy storage program.

2. Confidentiality

Information provided to the California Public Utilities Commission (“the Commission”) via its staff is confidential under California Public Utilities Code Section 583 and confidentiality requirements contained in D.06-06-066 and D.13-10-040. However, such information may be shared with the

³ This document and its attached spreadsheet constitute the CEP in its entirety.

⁴ As identified in the Decision Adopting Proposed Framework for Analyzing Energy Storage Needs (D.12-08-016), August 6, 2012, at 23.

California Independent System Operator (“CAISO”), each IOU’s Procurement Review Group (“PRG”), or any other regulatory agencies under the appropriate confidentiality protection, without destroying the confidentiality protection afforded by the Commission.

C. Standardized Planning Assumptions

The calculation of NMV requires assumptions for several inputs, including, but not limited to,

- Forecast hourly energy prices,
- Forecast capacity prices,
- Forecast ancillary services value,⁵
- Forecast monthly natural gas prices,
- Discount rate,
- System loss factors, and
- Forecast greenhouse gas (GHG) costs.

For any calculations under CEP, publicly available information will be used. One of the Commission’s consultants, Energy and Environmental Economics (E3)⁶ produced an avoided cost calculator, which provides some public information. This avoided cost calculator includes a publicly available forecast of natural gas prices using the 2011 Market Price Referent (MPR) methodology and a public forecast of GHG prices using the 2009 MPR methodology.⁷ In addition, E3’s avoided cost calculator also includes public price forecasts for energy and capacity, system loss factors for each IOU, and discount rates for each IOU.⁸ The most recent avoided cost calculator is named “DERAvoidedCostModel_v3.9_2011 v4d.xlsm” and is available on E3’s

⁵ In the absence of a publicly available forecast of ancillary services prices, the CEP will use surrogate prices for ancillary services based on agreed upon monthly percentages of energy prices.

⁶ For background, note that E3 also produced the Commission’s Market Price Referent (MPR) model.

⁷ The MPR models are available at http://www.ethree.com/public_projects/cpuc3.php

⁸ E3’s describes the source of inputs—e.g., discount rate, system losses and GHG costs—and calculation methodology of outputs—e.g., energy, capacity and natural gas prices—for the publicly available information in its avoided cost calculator in two documents at http://www.ethree.com/public_projects/cpucdr.php. The names of the two documents are: “Revised DG Cost Effectiveness Framework Avoided Cost Methodology Description” and “Avoided Cost Methodology Description”.

website.⁹ The aforementioned information from E3's avoided cost calculator will be included in the CEP as input assumptions.

⁹ http://www.ethree.com/public_projects/cpuc5.php

D. Descriptive Information Included in the CEP Spreadsheet

The CEP Spreadsheet will include descriptive information about the Offers as listed in Table 1.

Table 1
Descriptive Information Included in the CEP Spreadsheet

IOU (PGE / SCE / SDGE)	Commercial Operation Date	Self-discharge in Stand-by (MW/hour)
Name of Shortlisted Project	Term (Years)	Ramp rate – charge/discharge, up/down (MW/hour)
Interconnection Voltage (kV)	Max Capacity – Charge/Discharge at grid connection point (MW)	AGC (yes/no)
Interconnection Level (Transmission / Distribution)	Min Capacity – Charge/Discharge at grid connection point (MW)	Regulation at zero -- up/down (yes/no)
Local Capacity Area	Qualifying RA Capacity (MW)	Contract Cost (\$)
Zone (NP / ZP / SP)	Duration of max sustainable discharge rate (Hours)	Variable O&M for discharging (\$/MWh)
Status (New / Existing)	Efficiency at max capacity (%)	Fixed O&M (\$/kW-year)
Product (Dispatchable / RA)	Max daily switches – charge/discharge (# charges per day)	
Energy Storage Technology	Max cycles per lifetime (# cycles)	

E. Quantitative Information Included in the CEP Spreadsheet

1. Net Market Value Overview

For the CEP, the Offers will be evaluated in terms of dollars per kilowatt (\$/kW). NMV is the net present value (NPV) of future benefits minus future costs for the projects resulting from the Offers. The benefits will include the items listed in Table 2, levelized in \$/kW. Costs will be defined as the direct and indirect, fixed and variable costs of a given project over its term. Costs will include the items listed in Table 2, levelized in \$/kW. The CEP Spreadsheet will include quantitative information about the Offers as listed in Table 2 below.

Table 2
Quantitative Information Included in the CEP Spreadsheet

Market Benefits (Levelized \$/kW)	Market Costs (Levelized \$/kW)
Capacity / Resource Adequacy Value	Fixed Capacity Payments and Fixed O&M Cost
Energy Value	Charging Costs and Variable O&M Cost
Ancillary Services Value	Network Upgrade Cost (paid by CAISO consumers)
Distribution Investment Deferral Value (if applicable to project)	GHG Compliance Cost (if applicable to project)
	Debt Equivalency Cost
	Market Participation Costs

NMV is calculated for each Offer with the following formula based on publicly available information:

$$NMV = (C + E + AR + DD) - (F + V + N + GHG + DE + MPC)$$

Where:

C = Capacity / Resource Adequacy Value

E = Energy Value

AR = Ancillary Services Market Value

DD = Distribution Investment Deferral Value

F = Fixed Capacity Payments and Fixed O&M Cost

V = Charging Costs and Variable O&M Cost

N = Network Upgrade Cost

GHG = GHG Compliance Cost (if applicable to project)

DE = Debt Equivalency Cost

MPC = Market Participation Costs

2. Capacity / Resource Adequacy Value

The value of capacity / resource adequacy (RA) associated with each Offer will be determined based on the projected monthly qualifying RA capacity and publicly available forecast capacity prices.

3. Energy Value

The market value of energy deliveries is based on the hourly generation profile of each Offer considering operating characteristics and limitations, such as delivery date, delivery term and delivery location and operational constraints. The market value of the energy will be based on the publicly available forecast energy prices. The quantity of energy delivered will be an output of each IOU's dispatch modeling tool. System loss factors both at the transmission and distribution level depending on the interconnection will be used to incorporate losses specific for each IOU.

4. Ancillary Services Value

Ancillary Services (AS) value will be assessed based on the ancillary service capability of each Offer. In the absence of a publicly available forecast of AS prices, the CEP will use surrogate prices for ancillary services based on agreed upon monthly percentages of hourly energy prices.¹⁰ AS values will be determined by each IOU's dispatch modeling tool using the surrogate AS prices. An energy storage device can generally operate in either the AS market or the real time energy market but not both.

5. Distribution Investment Deferral Value

For Offers that provide a distribution investment deferral value, as calculated by each IOU using its own criteria, the resultant value will be shown for benchmarking and reporting purposes.

6. Fixed Capacity Payments and Fixed O&M Cost

The fixed payments for the project will be provided in the Offers.

7. Charging Costs and Variable O&M Cost

Charging costs for energy storage includes the cost of electricity to charge the project. The source of Variable Operations and Maintenance (O&M), station

¹⁰ Before utilities submit their completed CEP Spreadsheets including information on their shortlisted Offers, the IOUs will work with the Energy Division to determine the appropriate AS price forecast to be used in the CEP valuation.

use and other variable costs will be provided in the Offers. The amount of charging used by an energy storage project will be determined by each IOU's dispatch modeling tool.

8. Network Upgrade Cost

Transmission or distribution network-related costs will be part of the Offer's NMV. The IOUs may obtain and use results from Participants' interconnection studies, if available. Otherwise each IOU will develop and use its own estimate for transmission and distribution network upgrade costs.

Each Offer will include in its bid price the estimated cost of all the facilities needed to interconnect the project to the first point of interconnection with the transmission system grid. These facilities are referred to as direct assignment facilities, or "gen-ties". Because these costs are in the bid price, they are not included in the calculation of the transmission adder.

Network upgrades include all facilities that: (i) enable the project to be fully deliverable for RA counting purposes (upgrades after the point where a project's electricity first interconnects with and enters the subject utility's transmission grid); and (ii) transmit or deliver the full amount of power from the Project. Network upgrades include (a) transmission lines, (b) transformer banks, (c) special protection systems, (d) substation breakers, (e) capacitors, and (f) other equipment needed to transfer power to the consumer.

9. GHG Compliance Cost

For any energy storage project that includes technology that generates GHG emissions, a GHG compliance cost will be calculated and included in the NMV.

10. Debt Equivalence Cost

Long-term procurement contracts held by IOUs are treated by credit rating agencies as equivalent to long-term debt. This "debt equivalence" increases an IOUs borrowing costs.

11. Market Participation Costs

For example, in order to arbitrage the day-ahead and RT market, the storage device must overcome the difference between the day-ahead and RT Grid Management Charge ("GMC") cost.

F. Qualitative Information Included in the CEP Spreadsheet

To incorporate some qualitative value that cannot be captured in the quantitative metrics, the CEP Spreadsheet also includes a grid of twenty ‘end uses’ as identified in the Decision Adopting Proposed Framework for Analyzing Energy Storage Needs¹¹ and listed in Table 3, below. For each offer, the utility will identify which end uses are present. However, there will be no specific quantitative assessment of the benefits of end uses in the CEP Spreadsheet, other than those qualities already captured in the quantitative metrics discussed in Section E.

Table 3
End Uses Included in the CEP Spreadsheet

1. Ancillary Services: frequency regulation	8. Intermittent resource integration: wind (ramp/voltage support)	15. Distribution peak capacity support (upgrade deferral)
2. Ancillary services: spin / non-spin / replacement reserves	9. Intermittent resource integration: photovoltaic (time shift, voltage sag, rapid demand support)	16. Distribution operation (voltage / VAR support)
3. Ancillary services: ramp	10. Supply firming	17. Outage mitigation: micro-grid
4. Black start	11. Peak shaving	18. Time-of-use (TOU) energy cost management
5. Real time energy balancing	12. Transmission peak capacity support (upgrade deferral)	19. Power quality
6. Energy price arbitrage	13. Transmission operation (short duration performance, inertia, system reliability)	20. Back-up power
7. Resource Adequacy	14. Transmission congestion relief	

Note: the benefit of all end uses is not simply a sum of the benefits for each end use. In many cases, allocating some portion of an energy storage project to one end use limits the ability of that portion of the energy storage project to satisfy any other end use.

¹¹ Decision Adopting Proposed Framework for Analyzing Energy Storage Needs (D.12-08-016), August 6, 2012, at 23.

Attachment 1 to the Consistent Evaluation Protocol: "CEP Spreadsheet"

CONFIDENTIAL INFORMATION. Data provided to the CPUC herein is confidential under California Public Utilities Code Section 583, D.06-06-066, and D.13-10-040.

The Consistent Evaluation Protocol (CEP) is for energy storage benchmarking and general reporting purposes, per D.13-10-040.

		1	2	3	4	5	6	7	8	9	10	11	12
Descriptive Items													
	IOU (PGE / SCE / SDGE)												
	Name of Shortlisted Project												
	Interconnection Voltage (kV)												
	Interconnection Level (Transmission / Distribution)												
	Local Capacity Area												
	Zone (NP / ZP / SP)												
	Status (New / Existing)												
	Product (Dispatchable / RA)												
	Energy Storage Technology												
	Commercial Operation Date												
	Term (Years)												
	Max Capacity (MW)												
	Min Capacity (MW)												
	Qualifying RA Capacity (MW)												
	Duration of Max Sustainable Discharge Rate (Hours)												
	Efficiency at Max Capacity (%)												
	Max Daily Switches -- Charge / Discharge (# Charges)												
	Max Cycles per Lifetime (# Cycles)												
	Self-Discharge in Stand-by (MW / Hour)												
	Ramp Rate -- Charge / Discharge, Up / Down (MW / Hour)												
	AGC (Yes / No)												
	Regulation at Zero (Yes/No)												
	Contract Cost (\$)												
	Variable O&M for Discharging (\$/MWh)												
	Fixed O&M (\$/kW-Year)												
Quantitative Items*													
Market Benefits (CEP Assumptions)	Levelized Capacity RA Value (\$/kW)												
	Levelized Energy Value (\$/kW)												
	Levelized Ancillary Services Value (\$/kW)												
	Distribution Investment Deferral Value - if applicable (\$/kW)												
Market Costs (CEP Assumptions)	Levelized Capacity Payments and Fixed O&M Cost (\$/kW)												
	Levelized Charging Costs and VOM Cost (\$/kW)												
	Levelized Network Upgrade Cost (\$/kW)												
	Levelized GHG Compliance Cost (if applicable) (\$/kW)												
	Levelized Debt Equivalency Cost (\$/kW)												
NPV (CEP Assumptions) NPV (Proprietary IOU Assumptions)	Levelized Market Participation Costs (\$/kW)												
	Levelized Net Market Value \$/kW												
Applicable End Uses													
ISO / Market	Ancillary Services: Frequency Regulation												
	Ancillary Services: Spin / Non-Spin / Replacement Reserves												
	Ancillary Services: Ramp												
	Black Start												
	Real Time Energy Balancing												
	Energy Price Arbitrage												
	Resource Adequacy												
Generation	Intermittent Resource Integration: Wind (Ramp / Voltage Support)												
	Intermittent Resource Integration: PV (Time Shift, Voltage Sag, Rapid Demand Support)												
	Supply Firming												
Transmission / Distribution	Peak Shaving												
	Transmission Peak Capacity Support (Upgrade Deferral)												
	Transmission Operation (Short Duration Performance, Inertia, System Reliability)												
	Transmission Congestion Relief												
	Distribution Peak Capacity Support (Upgrade Deferral)												
Customer	Distribution Operation (Voltage / VAR Support)												
	Outage Mitigation: Micro-Grid												
	Time-of-Use (TOU) Energy Cost Management												
	Power Quality												
	Back-Up Power												

*With the exception of "NPV (Proprietary IOU Assumptions)" all of the Quantiative Items are calculated using standardized planning assumptions, as discussed in the Section C of the CEP.

Appendix D
Witness Qualifications

SOUTHERN CALIFORNIA EDISON COMPANY
QUALIFICATIONS AND PREPARED TESTIMONY
OF MARK E. NELSON

Q. Please state your name and business address for the record.

A. My name is Mark E. Nelson, and my business address is 8631 Rush Street, Rosemead, California 91770.

Q. Briefly describe your present responsibilities at the Southern California Edison Company.

A. I am the Director of Integrated Planning & Strategy in the Integrated Planning and Environmental Affairs department. My present responsibilities as the Director of Integrated Planning & Strategy include the development of long-term resource plans for SCE, monitoring the electricity markets to help assure their efficient operations, supporting generation initiatives and regulatory efforts at SCE, and management of the Project Development Division.

Q. Briefly describe your educational and professional background.

A. I earned a Bachelor of Science degree in Economics from Iowa State University with emphasis work in Chemical Engineering and Systems. I earned a Master of Science degree in Econometrics from Iowa State University with thesis work in electricity demand analysis. I first joined the Southern California Edison Company as a Planning Engineer in 1991 and held various management positions through 1996, including Manager of Real Time Pricing and Customer Software Systems. In 1996 I joined Edison Source and held a number of management positions including Director of Retail Energy Operations until my departure in 1999 following the cessation of energy marketing activities. From 1999-2003, I served as Managing Consultant of Commerce Venture Group LLC, with primary responsibility for energy sector consulting and analysis. I rejoined Southern California Edison in 2003 as Integrated Planning Manager and was subsequently promoted to Director of Generation Planning & Strategy prior to promotion to my current position.

1 Prior to joining Southern California Edison, I served as a Consultant for Midwest Solar,
2 Inc., a leading national supplier of large scale solar thermal systems, with responsibility
3 for economic and engineering analysis from 1980-83. From 1983-88, I held management
4 and analysis positions with subsidiaries of MidAmerican Energy, with responsibility for
5 generation and transmission projects, economic analysis, regulatory affairs and customer
6 services. From 1988-91, I served as Vice President of Analysis for DATASSIST, where
7 I was responsible for economic and statistical analysis of electric and gas utility projects.
8 I am the author of a number of energy and business books and articles, including: An
9 Econometric Study of Residential Electricity Demand (ISBN 1-56471-005-X),
10 Fundamentals of Business Process Analysis (1-56471-009-2), and "Understanding
11 Natural Gas Demand for Electric Utilities."

12 I have served as an adjunct professor or instructor at several universities, teaching
13 economics and business courses.

14 Q. What is the purpose of your testimony in this proceeding?

15 A. The purpose of my testimony in this proceeding is to sponsor portions of A.14-02-XXX,
16 Testimony of Southern California Edison Company in Support of Its 2014 Energy
17 Storage Procurement Plan, as identified in the Table of Contents thereto.

18 Q. Was this material prepared by you or under your supervision?

19 A. Yes, it was.

20 Q. Insofar as this material is factual in nature, do you believe it to be correct?

21 A. Yes, I do.

22 Q. Insofar as this material is in the nature of opinion or judgment, does it represent your best
23 judgment?

24 A. Yes, it does.

25 Q. Does this conclude your qualifications and prepared testimony?

26 A. Yes, it does.

SOUTHERN CALIFORNIA EDISON COMPANY
QUALIFICATIONS AND PREPARED TESTIMONY
OF MARK E. IRWIN

Q. Please state your name and business address for the record.

A. My name is Mark E. Irwin, and my business address is 14799 Chestnut Street,
Westminster, California 92683

Q. Briefly describe your present responsibilities at the Southern California Edison Company.

A. I am the Director of Technology Development in the Advanced Technology department.
My present responsibilities as the Director of Technology include the evaluation of the
performance of energy storage systems and transportation electrification technologies for
grid and fleet applications as well as the project management of all field deployment of
Smart Grid system demonstration projects.

Q. Briefly describe your educational and professional background.

A. I earned a Bachelor of Science degree in Business Administration from the University of
Southern California. I earned a Master of Business Administration degree in Finance
from the Wharton School at the University of Pennsylvania. I first joined Edison Mission
Energy as a Project Financial Analyst in 1987 and held various management positions
through 2000, including Vice President of Asset Management – Americas and Director of
Development. In 2005 I joined Southern California Edison as Manager of Contract
Origination and Analysis in Renewable and Alternative Power and held this role until
2007. In 2007, I re-joined Edison Mission Energy as Managing Director of Development
and led the solar development team until 2009. In 2010, I re-joined Southern California
Edison as Manager of Contract Origination in Renewable and Alternative Power. In
2011, I was appointed to my current position.

Q. What is the purpose of your testimony in this proceeding?

1 A. The purpose of my testimony in this proceeding is to sponsor portions of A.14-02-XXX,
2 Testimony of Southern California Edison Company in Support of Its 2014 Energy
3 Storage Procurement Plan, as identified in the Table of Contents thereto.

4 Q. Was this material prepared by you or under your supervision?

5 A. Yes, it was.

6 Q. Insofar as this material is factual in nature, do you believe it to be correct?

7 A. Yes, I do.

8 Q. Insofar as this material is in the nature of opinion or judgment, does it represent your best
9 judgment?

10 A. Yes, it does.

11 Q. Does this conclude your qualifications and prepared testimony?

12 A. Yes, it does.

SOUTHERN CALIFORNIA EDISON COMPANY
QUALIFICATIONS AND PREPARED TESTIMONY
OF MARK WALLENROD

Q. Please state your name and business address for the record.

A. My name is Mark Wallenrod, and my business address is 1515 Walnut Grove Avenue, Rosemead, California 91770.

Q. Briefly describe your present responsibilities at the Southern California Edison Company.

A. I am currently the Director of Demand Side Management Program Operations in SCE's Customer Service organization. In this capacity, I am responsible for managing SCE's portfolio of energy efficiency, demand response, distributed generation, and income qualified programs.

Q. Briefly describe your educational and professional background.

A. I received a Master of Science degree in Energy Management and Policy from the University of Pennsylvania in Philadelphia, PA. In fulfillment of this degree, I completed coursework at the Wharton School, Moore School of Engineering, and School of Public and Urban Policy. I received a Bachelor of Science degree from Dickinson College in Carlisle, PA. I have been with SCE for 30 years and have worked in various analytical, supervisory, and management positions in the Regulatory Policy and Affairs, Research, and Customer Service Departments. I have previously testified before the California Public Utilities Commission.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony in this proceeding is to sponsor portions of A.14-02-XXX, Testimony of Southern California Edison Company in Support of Its 2014 Energy Storage Procurement Plan, as identified in the Table of Contents thereto.

Q. Was this material prepared by you or under your supervision?

A. Yes, it was.

Q. Insofar as this material is factual in nature, do you believe it to be correct?

A. Yes, I do.

1 Q. Insofar as this material is in the nature of opinion or judgment, does it represent your best
2 judgment?

3 A. Yes, it does.

4 Q. Does this conclude your qualifications and prepared testimony?

5 A. Yes, it does.

SOUTHERN CALIFORNIA EDISON COMPANY
QUALIFICATIONS AND PREPARED TESTIMONY
OF JESSE BRYSON

Q. Please state your name and business address for the record.

A. My name is Jesse Bryson, and my business address is 2244 Walnut Grove Ave., Rosemead, CA 91770.

Q. Briefly describe your present responsibilities at the Southern California Edison Company.

A. I am the Principal Manager of Contract Origination in the Power Supply organization. My present responsibilities as Principal Manager of Contract Origination include running competitive solicitations for conventional and renewable power products, combined heat and power, energy storage, transmission, emissions products, resource adequacy, and financial hedging products. I am also responsible for negotiating all bilateral contracts as well as master agreements that establish trading relationships between SCE and our counterparties.

Q. Briefly describe your educational and professional background.

A. I have a Bachelors of Science degree in Biology from Pacific University in Forest Grove, Oregon. I joined SCE in 2002 in a power scheduling role before I moved to the energy contracts group. Since 2003, I have held various roles in energy contracts, including originator, senior originator and manager. I was promoted to my current role as Principal Manager in 2008. Prior to joining SCE, I worked at Enron North America from 1999 through 2001, where I held several roles including retail energy specialist, real time trader, manager of real time, and co-lead of the renewable power desk.

Q. What is the purpose of your testimony in this proceeding?

1 A. The purpose of my testimony in this proceeding is to sponsor portions of A.14-02-
2 XXX, Testimony of Southern California Edison Company in Support of Its 2014
3 Energy Storage Procurement Plan, as identified in the Table of Contents thereto.

4 Q. Was this material prepared by you or under your supervision?

5 A. Yes, it was.

6 Q. Insofar as this material is factual in nature, do you believe it to be correct?

7 A. Yes, I do.

8 Q. Insofar as this material is in the nature of opinion or judgment, does it represent
9 your best judgment?

10 A. Yes, it does.

11 Q. Does this conclude your qualifications and prepared testimony?

12 A. Yes, it does.

SOUTHERN CALIFORNIA EDISON COMPANY
QUALIFICATIONS AND PREPARED TESTIMONY
OF RANBIR SINGH

Q. Please state your name and business address for the record.

A. My name is Ranbir Singh, and my business address is 2244 Walnut Grove Avenue, Rosemead, California 91770.

Q. Briefly describe your present responsibilities at the Southern California Edison Company.

A. I am currently employed as Manager of Portfolio Development & Valuation in the Portfolio Planning & Analysis department of Southern California Edison's ("SCE's") Power Supply organization.

Q. Briefly describe your educational and professional background.

A. I graduated from Queen Mary Collage, University of London in May of 1998 with a Bachelors of Science Degree in Mathematics and Computing with First Class Honors. Prior to joining SCE I worked briefly for ABN Amro in their corporate finance department and for nine years as a Management Consultant for PA Consulting Group. During my time with PA I reached the rank of Principal Consultant and was responsible for managing teams of consultants on various consulting projects. Six of my nine years with PA were spent working with global energy sector clients on engagements ranging from Energy Transaction and Risk Management ("ETRM") systems implementation to Business Process and Quantitative Model development. I joined SCE as Manager of Portfolio Planning & Management in August 2007, responsible for monthly risk and resource adequacy reporting to CPUC in addition to analytical model development. I am currently responsible for managing all valuation processes related to renewable, alternative, and conventional procurement and developing analytical models to

1 support SCE's hedging program. I have previously testified before the
2 commission.

3 Q. What is the purpose of your testimony in this proceeding?

4 A. The purpose of my testimony in this proceeding is to sponsor portions of
5 A.14-02-XXX, Testimony of Southern California Edison Company in Support of
6 Its 2014 Energy Storage Procurement Plan, as identified in the Table of Contents
7 thereto.

8 Q. Was this material prepared by you or under your supervision?

9 A. Yes, it was.

10 Q. Insofar as this material is factual in nature, do you believe it to be correct?

11 A. Yes, I do.

12 Q. Insofar as this material is in the nature of opinion or judgment, does it represent
13 your best judgment?

14 A. Yes, it does.

15 Q. Does this conclude your qualifications and prepared testimony?

16 A. Yes, it does.

SOUTHERN CALIFORNIA EDISON COMPANY
QUALIFICATIONS AND PREPARED TESTIMONY
OF DOUGLAS A. SNOW

Q. Please state your name and business address for the record.

A. My name is Douglas A. Snow, and my business address is 8631 Rush Street, Rosemead, California 91770.

Q. Briefly describe your present responsibilities at the Southern California Edison Company ("SCE").

A. I am the Director of CPUC Revenue Requirements and Tariffs in SCE's Regulatory Operations Department. As such, I am responsible for the recovery of SCE's authorized revenue requirements and oversee the operation of various balancing and memorandum accounts, including the recovery of the balances in those accounts, and I am responsible for managing the implementation of SCE's tariffs and advice letters.

Q. Briefly describe your educational and professional background.

A. I graduated from Texas A&M University in May of 1982 with a Bachelor of Science Degree in Industrial Engineering. In June of 1982, I went to work for Southwestern Public Service Company ("SPS") in west Texas. While there, I was a supervisory engineer, responsible for revenue requirement calculations and rate design for both retail and resale customers. I filed testimony on behalf of SPS before the Texas Public Utility Commission and the Federal Energy Regulatory Commission. In November of 1993, I began to work for the Southern California Edison Company as a financial analyst in the FERC Pricing section in the Regulatory Policy & Affairs ("RP&A") Department. While working in the FERC section, I was responsible for the rate design for SCE's requirements sales for resale, Wheeling Access Charges, and wholesale Distribution Access Charges. In March 1998, I became a supervisor in the Revenue Requirements division of RP&A, responsible for supervising a group of analysts that oversee the forecasting and recording entries associated with all California Public Utilities Commission ("CPUC") regulatory mechanisms. In December 2001, I was promoted to the position of

1 manager in the Revenue Requirements division of RP&A. In August 2006, I was promoted to
2 Manager of CPUC Revenue Requirements, and in March 2013, I became the Director of CPUC
3 Revenue Requirements and Tariffs taking on the additional responsibilities for managing SCE's
4 tariffs. I have previously testified before the California Public Utilities Commission.

5 Q. What is the purpose of your testimony in this proceeding?

6 A. The purpose of my testimony in this proceeding is to sponsor portions of A.14-02-XXX,
7 Testimony of Southern California Edison Company in Support of Its 2014 Energy Storage
8 Procurement Plan, as identified in the Table of Contents thereto.

9 Q. Was this material prepared by you or under your supervision?

10 A. Yes, it was.

11 Q. Insofar as this material is factual in nature, do you believe it to be correct?

12 A. Yes, I do.

13 Q. Insofar as this material is in the nature of opinion or judgment, does it represent your best
14 judgment?

15 A. Yes, it does.

16 Q. Does this conclude your qualifications and prepared testimony?

17 A. Yes, it does.